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ABSTRACT

The resource room guide developed by Grand Island, Nebraska, schools is intended to help elementary level resource room teachers and the IEP (Individualized Education Program) team select services and curriculum to meet the mildly handicapped student's specific educational needs. The introduction describes the national background of resource room programs and the specific purpose of this guide. The following considerations for development of the resource room program are introduced: instructional goals and objectives; and principles of effective instruction--motivation, sequential teaching, models and cues, drill and practice, response generalization, analytical teaching, scheduling resource room students, and general classroom guidelines. The definition, development, and use of curriculum-based assessment are explained next, followed by general curriculum modification procedures. Computer-assisted instruction is considered in terms of educational and curriculum compatibility, and computer objectives are considered in terms of computer awareness and computer interaction skills. The section on curriculum for secondary school transition addresses content, transition skills, academic skills, self-management/study skills, social/adaptive behavior, secondary orientation, and transition curriculum teaching steps. This is followed by a description of the Instructional Materials Evaluation System, the Fry Readability Formula, and resource room exit requirements. A four-page list of references and an extensive list of curriculum materials are appended. (DB)

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INSTRUCTIONAL AND CURRICULUM GUIDELINES FOR THE RESOURCE ROOM PROGRAM

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INSTRUCTIONAL AND CURRICULUM GUIDELINES FOR THE RESOURCE ROOM PROGRAM

THE CENTRAL NEBRASKA SUPPORT SERVICES PROGRAM
A Three County Special Education Cooperative

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Foreword

Writing this guide has been a bigger task than what was first thought. Research in literature, surveys of administrators, regular and resource room teachers were examined and compiled. Visitations and phone calls to other schools in Nebraska, as well as consultation with staff at Kearney State College and the University of Nebraska were also conducted by the editor. The diverse nature of the many buildings where resource rooms are located, the populations of students served and the variety of special and regular education curriculum made writing a curriculum guide look almost impossible. In a strict sense, this guide is not like a typical curriculum guide because a compact set of objectives with clear cut procedures in "how to" deliver the curriculum does not and cannot exist. The resource room program flexibly serves the educational needs of handicapped students mainstreamed within regular education.

Obviously missing is a section on vocational curriculum. If the resource room is truely committed to serving the vast majority of handicapped students within the regular education system, then we must support those students and make sure they receive the same vocational support available to all "normal" students. Admittedly, a percentage of the resource room population will need more intensive vocational support and guidance. Those more severely handicapped students can be better served with a separate vocational curriculum guide.

This guide is not a procedural manual. Central Nebraska Support Services Program already has a procedural guide that outlines how the diagnostic team and other support personnel shall function within the resource room program. Since Nebraska has developed a new set of verification guidelines, it may well mean that the severity level of resource room students will increase making this guide and the procedural manual important source documents for better service to a wider range of mainstreamed handicapped students.

The editor of this guide assumes the resource room teaching staff possesses a high degree of professionalism and training. The diverse nature of resource room students, the grade range and building differences makes it impossible for this guide to tell a teacher "how to" set up a resource room nor can this guide tell "how to" best teach all handicapped students. This instructional and curriculum guide does contain a framework for good teaching and appropriate service to mainstreamed handicapped students, helping teachers to provide direction and continuity for major curricular decisions.

The Editor

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INTRODUCTION

GRAND ISLAND, NEBRASKA BACKGROUND

In Grand Island, the resource room program evolved from a self contained segregated half day service to a regular building level service with appropriate mainstreaming in regular classes. In the late 1960's, elementary resource room students attended their neighborhood school for half a day and special education at Connell School for half a day. Transportation was handled by a private bus company transporting between 100 and 200 students daily between 10 elementary schools. At the junior and senior high level the programs were integrated but students were limited to regular classes being able to take physical education, music, art, some industrial arts classes, and some home economics classes.

In the 1973-74 school year, a mainstreamed pilot project was undertaken at Barr Junior High to test the feasibility of mainstreaming. Selected resource room students were allowed in math, English, typing, business and some social studies classes. In 1974-75, a resource room was established at Howard Elementary as a full day program with appropriate mainstreaming. In 1975-76, all elementary resource room students were moved to regular elementary buildings, solving many transportation problems and self concept problems students experienced by being "different" and bussed away for part of their school day. Special education staff communication problems with regular teachers concerning curriculum was also solved by keeping resource room students in regular buildings. Gradually the building level resource room service model grew from less than 10 teachers to a CNSSP-wide service with more than 40 teachers in 3 counties.

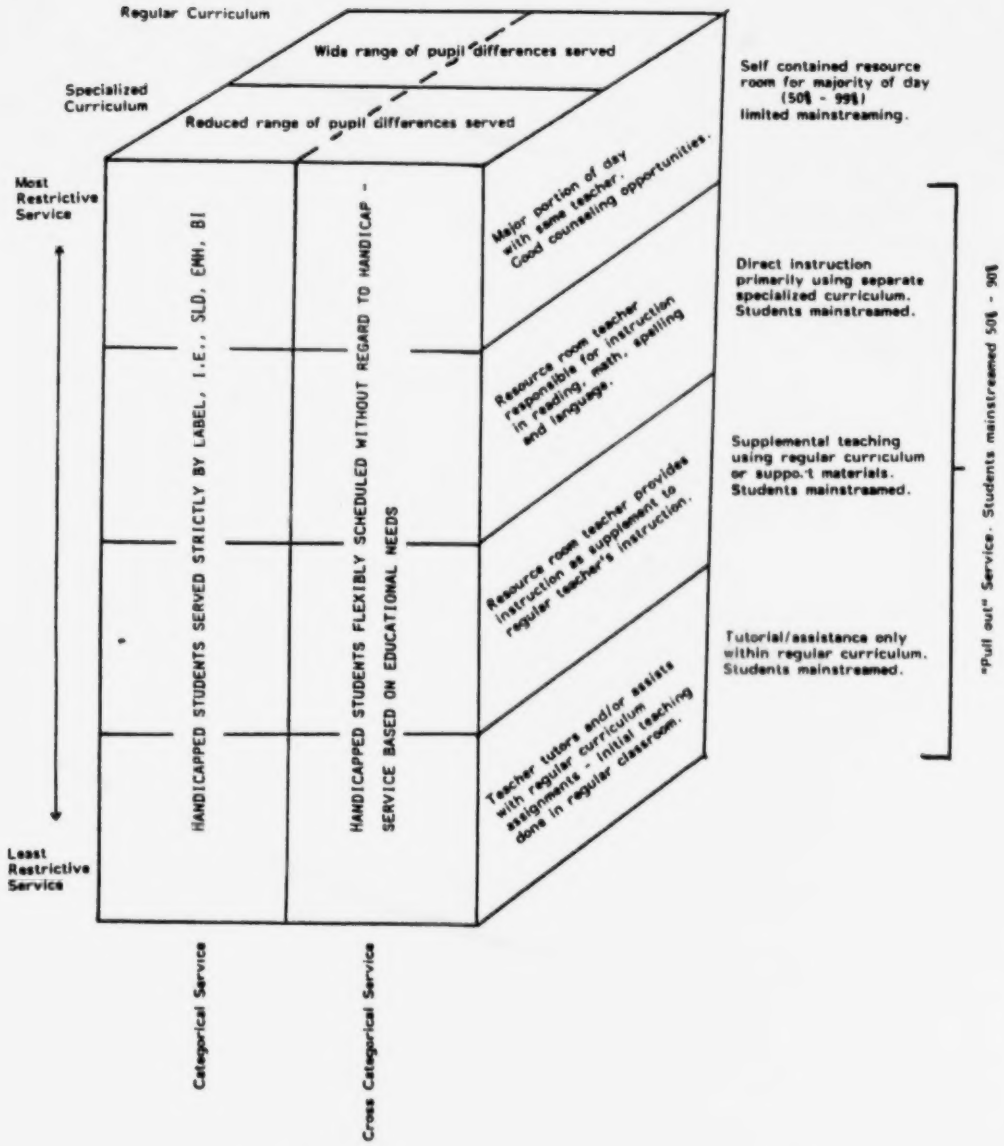
NATIONAL BACKGROUND

Current literature indicates that the resource room level of service is the most widely used educational service delivery system for the mildly, moderately handicapped (Marsh, Price & Smith, 1983: Mercer & Mercer, 1981: Wiederholt, Hammill & Brown, 1983). Resource room programs are typically defined as instructional arrangements in which handicapped students receive some special education instruction, but the majority of their instruction occurs in the regular education classroom (Elman & Ginsberg, 1981; Hewisher & Calhoun, 1978; Wiederholt et al., 1983).

Numerous variations of resource programs can be found within the definition established above. Wixson (1980) described two resource room models; one in which pupils received only direct instruction and one in which both direct and indirect services were offered. Paroy, Siegenthaler, and Tatum (1977) presented a model middle school resource room program in which inservice training and other staff development activities for regular education teachers were a major component. Other authors report resource room programs in which only particular groups of handicapped students were served (Galvin, Quay, Annesley, & Wery, 1971; Lewis, 1974). Tutorial and remedial approaches have been reported in some resource room programs (Brown,

RESOURCE ROOM SERVICE

AND CURRICULUM DELIVERY OPTIONS


Regular Curriculum
Wide range of pupil differences served
Specialized Curriculum
Reduced range of pupil differences served
Most Restrictive Service
Least Restrictive Service
HANDICAPPED STUDENTS SERVED STRICTLY BY LABEL, I.E., SLD, EMH, BI
HANDICAPPED STUDENTS FLEXIBLY SCHEDULED WITHOUT REGARD TO HANDICAP - SERVICE BASED ON EDUCATIONAL NEEDS
Major portion of day with same teacher. Good counseling opportunities.
Resource room teacher responsible for instruction in reading, math, spelling and language.
Resource room teacher provides instruction as supplement to regular teacher's instruction.
Teacher tutors and/or assists with regular curriculum assignments - initial teaching done in regular classroom.
Self contained resource room for majority of day (50% - 99%) limited mainstreaming.
Direct instruction primarily using separate specialized curriculum. Students mainstreamed.
Supplemental teaching using regular curriculum or suppo.t materials. Students mainstreamed.
Tutorial/assistance only within regular curriculum. Students mainstreamed.
"Pull out" Service - Students mainstreamed 50% - 90%
Categorical Service
Cross Categorical Service

(Shanks, 1985)

FIGURE 1

Kiraly, & McKinnon, 1979; Mayhall, Peschka, & Jenkins, 1974; The frequency of instruction was varied (Mayhall & Jenkins, 1977); or services were available through a itinerant resource teacher (Harris & Maher, 1975).

A survey by Friend & McNutt (1984) of all 50 states and the District of Columbia indicates all respondents use resource room programs in some form to serve a portion of their handicapped pupils. This same survey indicated learning disabled, mildly mentally handicapped, and emotionally disturbed pupils could be served in the resource room. Additionally, 28 states included moderately mentally handicapped, visually impaired/blind, hearing impaired/deaf, and physically handicapped students as possible recipients of resource room service.

Resource room students spend on the average 10 to 25 percent of their time in the resource room (Thomas, 1979). Most of an instructional day, for resource room students, is spent in the regular classroom working in regular classroom curricula. Active regular communication between regular class teachers and special education resource teachers has to be an important function of a resource room teacher. Bond (1981) reports that most resource and regular classroom teachers favor continued communication yet only 74 percent of 103 teachers in her survey believed the regular classroom teacher had any obligation to inform the resource teacher of new concepts, tests and classwork the mainstreamed student was responsible for completing. In Bond's (1981) survey of regular teachers, 98 percent had mainstreamed students in their classes yet less than 50 percent had ever taken a special education course.

The resource room model (Figure 1&2) has gained the acceptance of educators as an efficient means of meeting mildly handicapped students needs in the mainstream. Can expectations of a resource room program be formulated with consideration given to the quality of existing services within a building and school district? Can and should regular curriculum be used? When are special education materials used? Have exit criteria been considered for each student?

PURPOSE

The purpose of this guide is to help the resource room teacher and IEP team select the best possible service and curriculum for resource room students. The scope and intent of this guide is to provide alternative directions for curriculum selections based on the student's specific educational needs. Realizing that curriculum must be selected and modified based on the regular classroom and how each student functions in that environment. The determination of when to place the student in "special education" material will be based on the degree of success each student is making in relationship to his or her peers. When removing a student from the regular curriculum, the resource room teacher must weigh the importance of the special education curriculum against the students eventual return to the regular curriculum. Will the student have enough skill to progress in a reasonable fashion along with his or her peers when returned to the regular classroom materials?

INSTRUCTIONAL GOALS AND OBJECTIVES

The combination of regular and special education curriculum together must have the same goals and objectives that will be reflected on each handicapped students Individual Education Plan (IEP). The following objectives are broad in nature and shared with regular education, see the "CNSSP Resource Room Procedural Manual" for a more specific listing of resource room goals and objectives.

A. To provide the kind of instructional support for the child and his or her teachers that make feasible the student's continued enrollment in regular classes.

B. To develop and implement an instructional program which addresses the learning problems of children identified as needing intensive individual and small group instruction. The instructional program provided in a structured learning environment will teach handicapped children alternative methods of learning and studying.

C. To help each student learn to compensate for his or her learning problems and reduce academic failure.

D. To involve the special education and regular classroom teachers, through cooperative planning, in designing methods of utilizing the student's strengths in regular classes.

E. To minimize the stigmatization of special education and maximize the students' positive self concept.

F. To establish the resource room teacher as the educational advocate for the handicapped child with all school staff.

G. Short term and long term IEP objectives will address ways of assisting the student in improving in one or more of the following areas depending upon the nature of the handicapping condition:

1. Basic reading skills (decoding)
2. Reading comprehension
3. Mathematics calculation
4. Mathematics reasoning
5. Written expression (language)
6. Oral expression (language)
7. Listening comprehension
8. Perception (visual, auditory)
9. Behavior (emotional, social, organization, study skills)

Instruction and training is based on individual strengths and weaknesses. Educational strategies reflect a learning process orientation utilizing analytical teaching and attempt to remediate areas of deficit in the learning process and to utilize strengths in teaching-learning methods. The resource room teacher will maintain on-going communication with regular classroom teachers and parents. In this manner, both regular classroom teachers and parents will understand the areas of learning which need improvement. The resource

room teacher will continuously make recommendations as to how to use effective teaching-learning strategies and methods.

In the elementary school particularly, emphasis should be placed on the student learning how to learn so that the need for supplemental instruction is reduced as the student proceeds through school. In other words, the best resource room program is that which teaches learning skills to the student so that the need for segregated special instruction is minimized or eliminated eventually. Progress in the resource room program will be assessed and the determination to continue in the program will be made by the IEP team during the annual review. Whenever possible, specific exit criteria should be developed and included on the IEP. Each annual review conducted on all resource room students should routinely address additional mainstreaming and the feasibility of planning for an orderly exit from special education to whatever extent is possible, the goal being total integration into regular education.

PRINCIPLES OF EFFECTIVE INSTRUCTION

The essence of a successful resource room program is its flexibility and adaptability. A specific method can work well for one student in a specific situation but not work well for a similar student in another classroom. For example, children learn to read through various approaches: linguistic, direct instruction, phonetic, sight words, or language experience. Resource room teachers must determine based on educational history, evaluation data, and staffing recommendations, which method of instruction matches the student's specific educational needs and pattern of skills and abilities.

A resource room teacher must be thoroughly familiar with each student's total psychological and academic testing profile. This knowledge must be used by the teacher and or IEP team in choosing the curriculum to be used. A thorough knowledge of the various materials available (see appendix) to the resource room teacher must be compared to the student's educational needs. Knowing the scope and sequence of a particular curriculum to be considered is important. This guide cannot contain every conceivable scope and sequence chart for the variety of curriculum available and used by the resource room teaching staff. Understanding the basic principles for effective instruction across traditional disability categories and instructional situations will help the teacher more logically and purposefully choose curriculum that will fit each handicapped student's specific educational needs. These basic principles are:

A. Motivation

Students with learning deficits have experienced many failure situations. Because they are easily discouraged, it is necessary to put special effort into motivating them to continue working productively in their school work. Lesson plans providing high interest lessons and materials: alternate low probability tasks with high probability tasks; using social reinforcements such as teacher praise, positive attention and approval, material rewards, as well as behavior modification helps keep motivation high.

The proper use of audio-visual equipment such as cassette tape player-records, film strip projectors, record players, language masters, and computers have proven successful in motivating students. The use of learning centers and individual student folders also help add variety to school work while keeping the student productively at task.

The resource room student spends so little time in the resource room in comparison to the regular classroom that every minute spent in the resource room must be quality time with maximum learning potential. Being well organized along with efficient transition time from one activity to another is a must for resource teaching staff.

B. Sequential Teaching

When planning instruction, teachers must have a sequence in mind. A systematic approach to instruction is based on careful assessment of the student's performance, followed by specific goals and objectives. The tasks to be learned by the student should be in an orderly fashion, progressing from easy to difficult. Achievement should be rewarded, regardless of how slight the progress. Most of the commercially produced curriculum designed for special education is purposefully ordered and must be used as the author and publisher designed the material. Resource room teachers must continually review procedures to insure the material is being utilized properly. Any modification of commercially manufactured curriculum specifically designed for special education must be considered carefully and is not generally recommended without careful planning.

C. Models and Cues (Direct Instruction)

The technique of modeling is frequently used by teachers for reading and math instruction. Many handicapped students benefit from instruction in which a visual model is provided. Teachers often demonstrate how to solve a math example on the board while students observe. The students are then asked to imitate the teacher by completing the same problem at their desks. Then they solve similar examples using the model that has been provided. Sometimes a model can be provided on the pupil's worksheet for reference.

Many special education students need to be cued to remain at task to progress. The use of verbal cues, color cues, physical cues in the form of signals can help students with memory or sequencing problems.

D. Drill and Practice

In order for pupils to acquire a skill, they must have ample practice in applying it until it becomes an automatic

process. After the initial presentation, a variety of multisensory learning experiences should be provided in order to reinforce the task. Many opportunities should be provided for the students to see the task, hear the task, say the task, and do the task. In order to maintain the responses and practice, frequent reviews must be provided. These techniques help to ensure maintenance of an acquired skill.

Recommended materials are worksheets (commercial or teacher made); flash cards; manipulative materials, such as letter titles and beads; and media materials.

E. Response Generalization

Performance of a skill within the resource room is no guarantee that the pupil will be able to apply the skill in another situation. Students with learning deficits have difficulty transferring from one set of responses to another. For example, a pupil who has learned to apply a phonetic rule to recognize a word may not be able to use the rule to spell a word.

A variety of experiences, which include modeling, prompting, and curriculum sequencing, should be provided so that students can transfer a learning behavior or task to a new situation. Individualized instruction is desirable and necessary for handicapped students.

F. Analytical Teaching Methods

The resource room teacher should employ analytical teaching methods which have four basic characteristics: 1) the teacher observes the student engaged in the behavior of interest; 2) the pupil's responses are noted and analyzed within some constant frame of reference; 3) the selection of future steps to be taken depends on the interpretation of the results of successive response analyses; and 4) if the methodologies are flexible enough to be applied to almost all aspects of a student's school performance, including academic, linguistic, emotional, and social areas.

A resource teacher should participate actively in the direct instruction of students in order to; 1) know the dynamics of a particular pupil's instructional needs and problems; 2) become proficient in using a variety of educational techniques and programs; 3) demonstrate specific activities to other teachers; 4) and become more skillful and insightful.

The primary purpose for engaging in direct instruction with all resource room students is to obtain information that will enable the resource room teacher to make valid, accurate assessments about the capabilities and needs of youngsters. To do this, one must first have been involved in analytical teaching in order to obtain valid and reliable data about what and how to teach

handicapped students regardless of age.

Direct instruction can also serve as a demonstration or modeling technique. The resource room teacher may invite the regular classroom teacher to the resource room to see a lesson taught there. When demonstration teaching it is imperative that the observing teacher understands the critical features being shown or emphasized. Demonstration teaching is also an appropriate way to assist the regular classroom teacher in assuming an increasing responsibility for implementing programs as students begin to move into a less restrictive environment and, in some cases, eventual exit from the resource room following the exit requirements on the individual student's IEP.

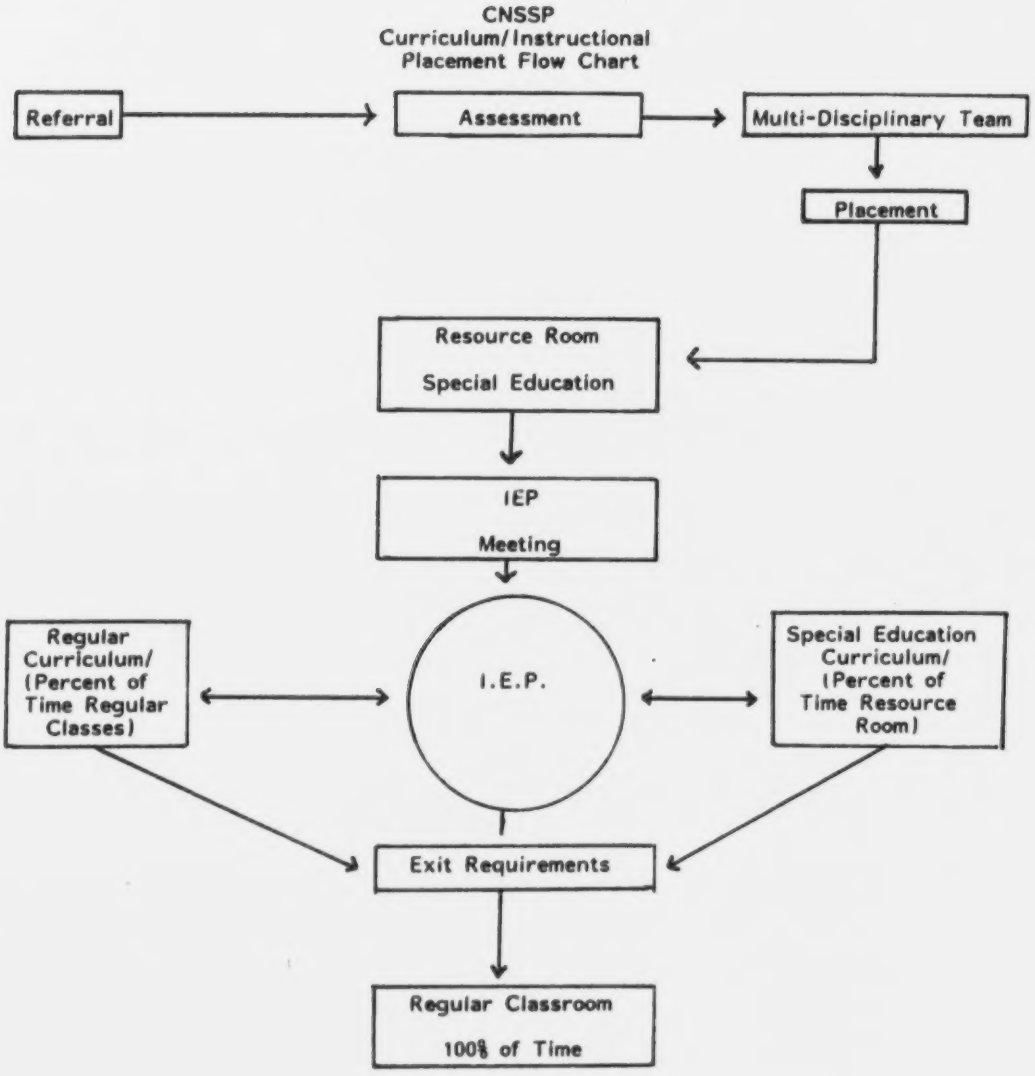
Students are referred (Figure 2) to special education because their regular classroom teachers see them as presenting or experiencing significant problems in the regular classroom environment. In return, these teachers expect supportive action from the resource room teacher that includes; 1) an explanation of why referred students perform as they do; 2) some remedial activities or management techniques that can be used in their classrooms; and 3) a special program for each pupil designed by the resource room teacher as outlined in the IEP and implemented in the resource room as well as the regular classroom as appropriate.

G. Scheduling Resource Room Students

Planning and preparation time is greatest during the beginning weeks of the school year. It is recommended that no students be assigned to the resource room for one to three days after the start of the school year. This may not be practical at the secondary level, however good communication and planning must take place at the secondary level as well as at the elementary level. The resource room teacher needs time to; 1) re-evaluate informally students who were in the resource room program last year and require testing for IEP updating, 2) evaluate new students for instructional purposes, 3) evaluate curriculum and instructional groupings and 4) develop the best schedule. The building principal, the special education teacher and regular classroom teachers will confer to determine an appropriate schedule with the understanding that the building principal has the ultimate responsibility for scheduling.

H. General Classroom Guidelines

Every resource room has a uniqueness based on the building environment, regular curriculum, and the general personality a school develops from its corresponding communities. Some resource rooms have stable case loads while others vary widely over the course of a school year. Realizing that unique problems present themselves from time to time, the following general guidelines serve as a base for service



(Shanks, 1985)

FIGURE 2

that is fairly consistent in Nebraska.

1. Each pupil with a handicapping condition requiring a resource room program shall receive not less than three hours of instruction per week or less than 10% of the student's instructional time each day.

2. Pupils shall not spend more than 50 percent of their time during the day in the resource room.

3. An instructional group which includes pupils with handicapping conditions should be limited to a range of five to eight students per teacher if at all possible.

4. The composition of instructional groups in a resource room is usually based on the similarity of the individuals educational needs according to:

   a. levels of academic or educational achievement learning rates;

   b. levels of social development;

   c. levels of physical development or medical conditions;

   d. levels of language development and;

   e. the management needs of the pupils in the classroom.

5. The total number of pupils with a handicapping condition assigned to a resource room teacher should be between 12 and 20 if at all possible or a Full Time Equivalency (FTE) range of 4.5 to 6.5 students (based on actual time students are in the resource room).

6. When grouping the students for instruction and scheduling, the following criteria will be observed:

   a. educational factors such as levels of academic or educational achievement and learning rate;

   b. educational strengths, the likes and dislikes of each student;

   c. learning styles;

   d. attention and behavior control factors - level of social development;

   e. number of students in the group;

f. level of physical development.

The scheduling of students must be flexible in order to be responsive to each student's needs. Scheduling problems must be discussed with regular classroom teachers and the principal to assure that the child attends on a regular basis so that attendance and academic requirements are met in all subjects. The handicapped student is in the resource room for specific reasons and must be efficiently served each school day.

" 'Fail' is a terrible word, Mrs. Hallawell. How about 'redshirted'?"

(Phi Delta Kappan, December 1985)

CURRICULUM BASED ASSESSMENT (CBA)

Resource room teachers make a variety of curricular decisions each year. The arrival of each new student on case load marks the beginning of a decision making cycle that involves placing students into curricula and forming instructional groups. As the year progresses, performance on the Individual Educational Plan (IEP) and within a curriculum must be continuously monitored to evaluate student progress and make instructional modifications. During the year, resource room teachers are asked to discuss students' academic performance at parent teacher conferences and IEP meetings (Blankenship, 1985).

To perform any of these functions, teachers need to be able to link assessment results to curriculum and instruction. Reliance on achievement test data and other standardized measures alone precludes making the necessary link for every student. Excellent standardized measures exist that effectively link assessment to the curriculum such as the McGraw-Hill Comprehensive Test of Basic Skills (CTBS). Not all resource room teachers have access to the CTBS and other such measures and because many of these standardized tests are group administered once or twice during the year a consistent check of student progress over short periods of time cannot be accomplished using standardized instruments. The disadvantages of basing instruction solely on the results of achievement tests are well known, the main drawbacks are that measurement is infrequent as previously mentioned and there is no assurance that the items on the test reflect the skills contained in the curriculum used in the classroom (Eaton & Lovitt, 1972; Freeman, Kuhs, Knoppen, & Porter, 1982; Jenkins & Pany, 1978). In recent years, interest has intensified in developing other more reliable methods of assessing academic progress. The most promising alternative to emerge is curriculum based assessment (CBA).

The concept of curriculum based assessment is not new, approaches vary with respect to the development and use of CBAs. The content of this guide is one variation of CBA and oriented toward classroom teachers, focusing on the essential characteristics of CBA, providing suggestions for developing them, and on describing procedures for using CBA data to make instructional decisions.

CBA DEFINED

An excellent definition of CBA is "the practice of obtaining direct and frequent measures of a student's performance on a series of sequentially arranged objectives derived from the curriculum used in the classroom" (Blankenship & Lilly, 1981). This linking of assessment to curriculum also refers to the instrument itself. CBAs can be given over a period of a few days to provide students with multiple opportunities to respond to similar items on different occasions. CBAs given over a period of time ensures that the results of the measurement will reflect a student's typical performance.

CBAs can be given at the beginning of the school year to place

students into specific curriculum. The CBAs would be based on specific objectives from the curriculum being used. A CBA would not be necessary if a placement test already existed for the curriculum being considered. However, a CBA could be developed to measure growth on specific skills after placement into the curriculum. All or parts of a CBA can be re-administered immediately following instruction on a topic to assess skill mastery. Following mastery, the teacher can use CBAs periodically during the year to measure long-term retention (Blankenship, 1985).

Any type of curriculum can have a CBA or several CBAs developed to help teachers measure mastery. One CBA could be developed for reading, another for mathematics, and a third for spelling. The scope and number of CBAs developed depends upon the number of skills a teacher wishes to measure. A teacher desiring a level of mastery on students' knowledge of letter sounds might design a CBA that would include all the sounds (Tables 1, 2, & 3) presented in the order in which they appear within each level of a reading series used in the classroom (Idol-Maestas, 1983). A CBA could also be developed to measure oral reading and comprehension within a lesson or whole series. In curriculum materials, such as mathematics, where the lessons are divided into units, a CBA can be developed around specific skills presented in each chapter or unit (Blankenship, 1985).

CBA DEVELOPMENT AND USE

The process of development and use of a CBA is for the most part self explanatory. Some of the steps do however, require some discussion. First, the basic steps in developing a CBA are:

A. List the skills presented in the material to be used.

B. Examine the list to see if all important skills are presented.

C. Decide if the resulting, edited list has skills in a logical order.

D. Write an objective for each skill on the list or use the manufactures objectives list for the material.

E. Prepare items to test each listed objective.

F. Prepare testing materials for student use representing the objectives.

G. Plan how the CBA will be given (oral, written, group individually administered, etc.).

H. Give the CBA immediately prior to beginning instruction on a topic.

I. Study the results; which students have already mastered

TABLE 1
Partial list of skills included in consonant blends
for CBA Test Construction

SKILL	SKILL INTRODUCED LESSON #/ # WORDS
When presented a word beginning with two consonants, the student is able to blend the beginning sound with the rest of the word then sound out the word.	
Students are asked to say the following blends:	
1. sl	#125/1
2. st	#129/1
3. br	#137/1
4. sw	#148/1
5. fl	#152/1
6. sm	#155/1
WORDS WITH BLENDS	
1. Given two words with blend "sl" student says words correctly.	#132/2
2. Given two words with blend "st" student says words correctly.	#133/2
3. Given two words with blend "br" student says words correctly.	#138/2
4. Given two words with blend "sw" student says words correctly.	#150/2
5. Given two words with blend "fl" student says words correctly.	#155/2
6. Given two words with blend "sm" student says words correctly.	#159/2

TABLE 2
Sample results of a CBA given prior to instruction

Name	Date	Teacher models blend student points to blend	1	2	3	4	5	6
Joe	1/5	2/6	0/2	0/2	0/2	0/2	0/2	0/2
	1/6	2/6	0/2	0/2	0/2	0/2	0/2	0/2
Scott	1/5	0/6	0/2	0/2	0/2	0/2	0/2	0/2
	1/6	1/6	0/2	0/2	0/2	0/2	0/2	0/2
Pam	1/5	4/6	1/2	0/2	0/2	0/2	0/2	0/2
	1/6	4/6	1/2	0/2	0/2	0/2	0/2	0/2

TABLE 3
Sample results of a CBA given after instruction

Name	Date	Teacher models blend student points to blend	1	2	3	4	5	6
Joe	1/26	6/6	2/0	2/0	2/0	2/0	0/2	2/0
	1/27	6/6	2/0	2/0	2/0	2/0	0/2	2/0
Scott	1/26	4/6	2/0	2/0	2/0	2/0	2/0	2/0
	1/27	4/6	2/0	2/0	2/0	2/0	2/0	2/0
Pam	1/26	6/6	2/0	2/0	2/0	1/1	2/0	2/0
	1/27	6/6	2/0	2/0	2/0	2/0	2/0	2/0

NOTE: Scores reported as number of correct answers/number of incorrect answers. Boxed items indicate further instruction needed on these items tested.

the skills? Which students have the skills for instruction? Which students lack mastery of prerequisite skills?

J. Re-administer the CBA after instruction on the topic; which students have mastered the skills and can move on to new material? Which students are progressing but need more practice or continued instruction? Are there any students making no progress and need further instructional modifications.

K. Periodically re-administer the CBA throughout the year to assess for long-term retention (Blankenship, 1985; Blankenship & Lilly, 1981).

To discuss and clarify, step A is a list of skills of a curriculum but may require the teacher to delete, add or re-sequence skills that are poorly sequenced or have large gaps between skills. Teachers need to closely examine skills with a critical eye to ensure a match between assessed skills and those actually taught.

Writing objectives in step D requires the teacher to carefully specify the conditions the student is to perform a behavior and the level of performance required to demonstrate mastery. For handicapped students, these conditions are often spelled out on the IEP. Care must be taken that students have the necessary materials, that a sufficient number of items is included to assess each skill. Alternate forms may be needed containing the same types of items so repeated use of the measurement can be given on different occasions (Blankenship, 1985).

A CBA requiring written responses can be given to an entire group of students. No rigid time requirements are needed for a CBA. Students can complete unfinished portions during the day working around their schedules. CBAs can require only oral responses and can be given individually while other students are engaged in seat work. Points students should understand are;

A. The teacher is using the measure to identify skills the students need to learn.

B. Students may not know many of the questions, it is acceptable to leave items blank.

C. By taking the CBA, students can avoid being taught skills they have already mastered.

GENERAL CURRICULUM MODIFICATION PROCEDURES

A lot of what is taught in the regular classroom can be modified for special education resource room students. One of main problems facing the resource room teacher is time. "Where will I find the time to modify the regular curriculum?" Each teacher must evaluate his or her time in relationship to the resource room schedule and case load and decide how much modification is really needed. What

is the purpose of the modification? Is the modification of regular curriculum materials part of the student's IEP? Is the modification of curriculum due to assistance with regular classroom work or due to direct instruction in that subject in the resource room?

CURRICULUM MODIFICATION STEPS

When modifying regular curriculum the special education teacher must appraise the instructional process of the curriculum against the students identified strengths and weaknesses. In order to produce efficient and effective learning, the teacher must use time wisely. The following steps serve as guidelines for regular curriculum modification:

A. Break the unit or lesson into smaller learning segments or steps.

B. Provide for more repetitive drill with well planned follow-up from previous lessons.

C. Diversify activities whenever possible using computer assisted instruction, taping or other media to utilize all the student's senses.

D. Establish well defined objectives for each lesson or unit. All activities must move toward the lesson's objective.

E. Assess each student within the curriculum (curriculum based assessment) to help determine the correct level of difficulty for each individual.

F. Build in specific monitoring for the student to assess achievement of the lesson's objective.

G. Accelerate, slow down or repeat the lesson or unit based on the monitoring of student achievement of the objective. Use curriculum based assessment to test for long term retention.

H. Plan to use all the principles of efficient and effective learning such as Bloom's Taxonomy which explains the levels of cognition; knowledge, comprehension, application, analysis, synthesis and evaluation.

COMPUTER ASSISTED INSTRUCTION (CAI)

The greatest potential benefit from microcomputers to special education students in the resource room is in the delivery of instruction. To assist the teacher in the delivery of instruction, the microcomputer offers unique compensations while actively involving the learner.

MICROCOMPUTER APPLICATIONS

With the microcomputer, resource room students can engage in

learning in a variety of ways. The major applications are:

A. Drill and practice

B. Tutorial

C. Simulation

D. Educational Games

E. Discovery

F. Problem Solving

Drill and practice programs lend themselves to the overlearning concept of repetitive presentation of information until a student meets the desired level of performance. Having material presented a number of additional times frees the teacher to work with other instructional groups or individuals.

"My memory software was incompatible with her test."

(Phi Delta Kappan, December 1985)

The number of tutorial programs appropriate for use in special education has been somewhat limited. As more software becomes a available, the tutorial program offers tremendous opportunities for individualization of instruction. Tutorial programs can remediate identified deficiencies through instruction and practice. Compensation for student inabilities can be built into tutorial programs as well as enrichment, simulations, games and problem solving situations. Tutorial software can contain three or four levels of instruction to which the student can be automatically branched based upon initial assessment by the program, by the teacher or by the student's performance within the program.

Simulations can be used to allow students to practice or demonstrate skills which have been developed, to assess the level of competence in a given area of instruction, or simply encourage discovery.

EDUCATIONAL COMPATIBILITY

A primary consideration in determining whether the software is educationally compatible is whether or not use of the computer is appropriate. Every medium has its own advantages and disadvantages, and the computer is no exception. Initially, much software did not reflect the power of the computer but became a novel method of presenting traditional instruction. Given the cost of the hardware and software, it is fair to say, "Use the computer only when educational advantages outweigh the disadvantages plus the cost." There is, however, a cost in not using the computer.

Careful consideration must be given to the computer compatibility with handicapped students. Any educational material or media that is not appropriate to the specific needs of the learner will be of questionable value. Since both input and output is in a printed format, the user must have adequate command of language to be able to read what is presented and to be able to respond appropriately. For the handicapped, there is often a lack of congruence between the topic being addressed by the software and the level of reading required to operate the program. Some software designed for use at the elementary level can often require reading at a level higher than what is to be expected from many elementary level students. Some software is also produced which requires cognitive skills that cannot reasonably be expected from the audience to which the software is geared (Hannaford, 1983)

CURRICULUM COMPATIBILITY

After addressing the needs of the learner, the teacher must then look at the software from the standpoint of compatibility with curriculum. Each school has a different general curriculum that effects the resource room and each resource room can have a curriculum that is varied according to the needs of the handicapped students being served. Curriculum compatibility becomes the responsibility of the teacher and can consist of many features. A total curriculum

which can be used with the computer is not realistic. The smaller the curricular segment, the more likely that some software which addresses a specific need within the curriculum will be available. Curriculum compatibility also means that the software must fit with the philosophy of the school (and resource room program) where it is being used. The compatibility of the software with the curriculum needs of the individual student and his or her IEP needs must also be considered. If the software will not meet the students identified needs then it should not be used.

Another factor that influences educational and curricular compatibility, is whether or not the software meets the teacher's needs. If a computer program does not meet the teachers's needs, it should not be used. When considering this issue teaching staff and administrators must address the teacher's instructional style. Just as some teachers cannot effectively use films or discussions, some cannot effectively use the microcomputer due to its incompatibility with their teaching style. Software needs to be highly usable by both teacher and learner. Software requiring continual teacher monitoring may not meet teacher needs. Neither will teacher needs be met if a software package does not provide the teacher with supplemental material containing an explanation of the content, the objectives and other pertinent information.

Software, to be educationally compatible for special education must:

A. The use of the microcomputer must be appropriate for the particular educational task;

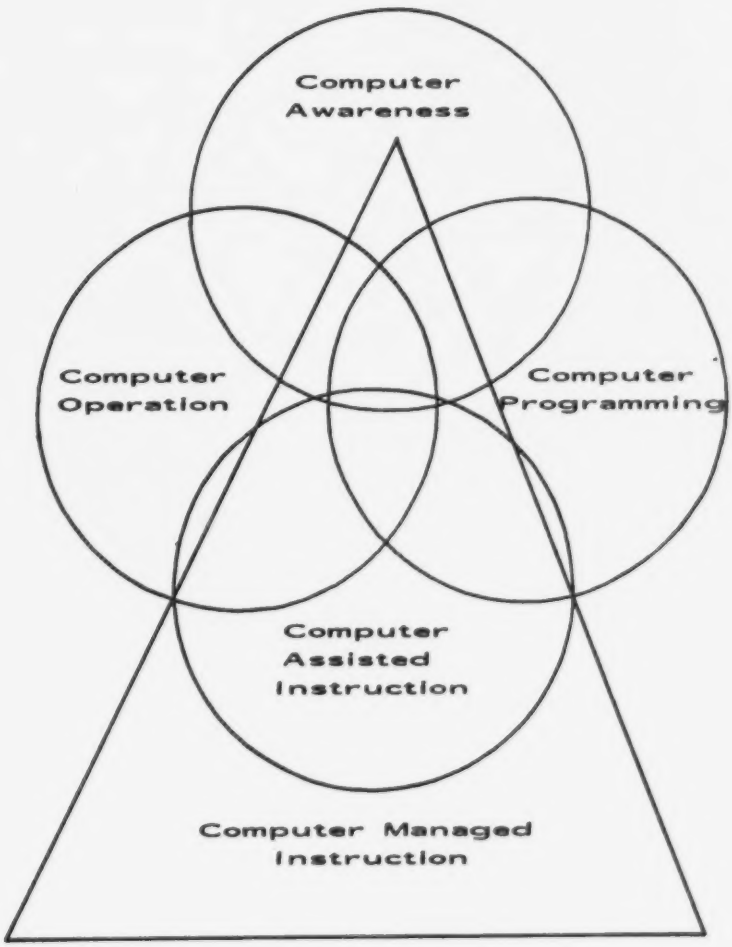
B. The software must address learners' needs;

C. The software must be compatible with the curriculum;

D. The software must meet the needs of the teacher.

Serious faults in one or more of these areas will reduce the effectiveness of instruction and hence the educational value of the software for handicapped learners (Hannaford, 1983).

Before special education resource room students can productively interact with a computer for learning, students will have to develop a degree of computer literacy. Some resource room students may already have varying degrees of computer knowledge. The two general areas of computer literacy for resource room students will be computer awareness and computer operation. Both of these areas of computer literacy can be taught while students are learning to use software designed to assist teacher instruction. Most computer designed curriculum offers awareness, operation, and programming as part of computer assisted learning strategies (Figure 3). Since most resource room students will be using the computer to assist learning within the curriculum being taught, programming will not normally play a role in a student's instruction.



(Goodson, 1982)

FIGURE 2.3

Computer curriculum and use has to be undertaken with the idea that teachers do not truly know students' limits of mastery and achievement. The following objectives are rudimentary and presented as a general guide to aide teachers and special education students in learning how to learn using the computer as a tool.

COMPUTER OBJECTIVES

COMPUTER AWARENESS

The student will:

A. Recognize the makeup of a computer.
   1. Identify parts of a computer.
   2. Use the microcomputer in the school.
   3. Use a prepared program in a microcomputer.
   4. Understand computer terms.
   5. Use appropriate terms when talking about computers.
   6. Define software and hardware.
   7. Explain how a computer works (input/output).
   8. List different computer languages.
   9. Recognize different computer types (sizes, brands).

B. Describe how computers affect our lives.
   1. Describe common uses of computers.
   2. Explain ways computers affect people's lives.
   3. Identify computer-related occupations.
   4. List values of computer skills for future employment.
   5. Explain the statement "Computer mistakes are mistakes by people."
   6. Identify common tasks which are not suited for computers.

C. Trace the history of computers.
   1. List the characteristics of each generation of computers.
   2. Learn about Silicon Valley.
   3. Describe the impact of computers on Silicon Valley.

D. Understand the moral issues involved with computer use.
   1. Understand implications of copyright laws.
   2. Identify advantages and dangers of computer data bases.
   3. Describe the serious legal issues resulting from wide spread computer use.
   4. Identify and read computer books and magazines.

COMPUTER INTERACTION SKILLS

The student will:

A. Develop keyboard skills.
   1. Identify and use letters and numbers on a keyboard.
   2. Identify and use common special-purpose keys.
   3. Develop correct keyboarding skills.

B. Demonstrate general uses of the computer.
   1. Demonstrate proper care of software/hardware.
   2. Demonstrate how to insert the disk, turn on the computer and boot a program.
   3. Demonstrate ability to stop, escape from and continue a program as needed.
   4. Run a program from the catalog or menu.
   5. Recognize simple error messages (syntax error, break in, etc)

C. Demonstrate specific uses of the computer.
   1. Use and interact with a drill and practice program.
   2. Use and interact with a simulation program.
   3. Use and interact with a problem-solving program.
   4. Use a computer as a word processor.

The availability of computers and the teacher's expertise plays a role in students' learning. Each school and resource room must assess the strengths of staff, the configuration of computers, their location and priority of usage. How best can computers and available software support the objectives on each handicapped student's individual educational plan? Is appropriate software available and how is software evaluated (see figure 4)?

"Dad says, 'Ask your mother,' and mother says, 'Ask the mainframe.'"

(Phi Delta Kappan, November 1985)

FIGURE 4

INSTRUCTIONAL SOFTWARE EVALUATION

CIRCLE ONE
OVERALL EVALUATION
1 2 3 4 5
(See bottom pg. 3)

PROGRAM NAME: PRICE:

SUBJECT/CURRICULUM COORELATION:

DISTRIBUTOR:
ADDRESS:
PERIPHERALS:

COMPUTER:
MEMORY:

INSTRUCTIONAL RANGE:
CIRCLE: LEVEL K 1 2 3 4 5 6 7 8 9 10 11 12 PROFESSIONAL

ADJUSTED CORE EXTENDED SPECIAL NEEDS OTHER

PROGRAM USES:
___DRILL AND PRACTICE
___TUTORIAL
___SIMULATION
___INSTRUCTIONAL GAME
___PROBLEM SOLVING
___INFORMATIONAL
___OTHER

CRITICAL PREREQUISITE SKILLS FOR USER:

SPECIAL INSTRUCTIONAL CONCERNS:

PROGRAM DESCRIPTION INCLUDING INSTRUCTIONAL OBJECTIVES:

MAJOR STRENGTHS:

MAJOR WEAKNESSES:

MINIMUM EXECUTION TIME:

REVIEWER(S):
LOCATION: LEVEL: DATE:

CRITERIA FOR EVALUATION

INSTRUCTIONAL QUALITY

		DISAGREE--AGREE	
1.	THE PURPOSE OF THE PACKAGE IS WELL-DEFINED.	1 2 3 4 5	N/A
2.	PRESENTATION OF CONTENT IS CLEAR AND LOGICAL.	1 2 3 4 5	N/A
3.	LENGTH, GRAPHICS, COLOR, SOUND ARE USED FOR APPROPRIATE INSTRUCTIONAL REASONS.	1 2 3 4 5	N/A
4.	SCREEN FORMATTING IS EFFECTIVE.	1 2 3 4 5	N/A
5.	PROGRAM ALLOWS FOR STUDENT INTERACTION BEYOND ANSWERING SIMPLE QUESTION.	1 2 3 4 5	N/A
6.	PROGRAM MAINTAINS A RECORD OF PERFORMANCE THAT IS AVAILABLE TO STUDENT AND TEACHER.	1 2 3 4 5	N/A
7.	SAFEGUARDS EXIST TO PREVENT STUDENT FROM STOPPING PROGRAM WITH INAPPROPRIATE RESPONSES.	1 2 3 4 5	N/A
8.	STUDENT CONTROLS THE RATE, DIFFICULTY, AND SEQUENCE OF PRESENTATION AND REVIEW.	1 2 3 4 5	N/A
9.	LEVEL OF DIFFICULTY IS APPROPRIATE FOR TARGET AUDIENCE.	1 2 3 4 5	N/A
10.	INTENDED USERS CAN EASILY AND INDEPENDENTLY OPERATE THE PROGRAM.	1 2 3 4 5	N/A
11.	PROGRAM USES RELEVANT COMPUTER CAPABILITIES.	1 2 3 4 5	N/A
12.	PROGRAM IS RELIABLE IN NORMAL USE.		

CONTENT

1.	CONTENT IS ACCURATE.	1 2 3 4 5	N/A
2.	SUPPLEMENTARY MATERIALS MEET INSTRUCTIONAL NEEDS.	1 2 3 4 5	N/A
3.	PROGRAM ACCOMPLISHES THINGS A GOOD WORKBOOK CANNOT DO.	1 2 3 4 5	N/A
4.	RESPONSES TO CORRECT ANSWERS ARE APPROPRIATE TO CONTENT AND REWARDING TO STUDENT.	1 2 3 4 5	N/A
5.	CONTENT HAS EDUCATIONAL VALUE FOR HANDICAPPED STUDENTS.	1 2 3 4 5	N/A
6.	GRAPHICS AND CONTENT IS FREE OF RACE, ETHNIC, SEX, AND OTHER STEREOTYPES.	1 2 3 4 5	N/A

INSTRUCTIONAL SOFTWARE EVALUATION
PAGE 3

	DISAGREE--AGREE	
7. PROGRAM HAS INSTRUCTIONAL OBJECTIVES.	1 2 3 4 5	N/A
8. PROGRAM HAS SUPPLEMENTARY STUDENT MATERIALS.	1 2 3 4 5	N/A
9. STEP-BY-STEP INSTRUCTIONS ARE PROVIDED.	1 2 3 4 5	N/A
10. SAMPLE SCREENS AND COMMANDS ARE PROVIDED.	1 2 3 4 5	N/A
11. PUBLISHER PROVIDES FOR REPLACEMENT OF PARTS.	1 2 3 4 5	N/A
PROGRAM PRESENTATION		
1. THE PROGRAM IS PERSONALIZED.	1 2 3 4 5	N/A
2. THE TEXT IS WELL SPACED.	1 2 3 4 5	N/A
3. INFORMATION IN TEXT IS ACCURATE.	1 2 3 4 5	N/A
4. SOUND IS USED APPROPRIATELY.	1 2 3 4 5	N/A
5. STUDENTS CAN ANSWER CORRECTLY WITHOUT READING.	1 2 3 4 5	N/A
LEARNER RESPONSE		
1. BRANCHING IS USED TO REMEDIATE FOR ERRORS.	1 2 3 4 5	N/A
2. LEARNER IS SIGNALLED FOR RESPONSE.	1 2 3 4 5	N/A
3. SAMPLE RESPONSES ARE USED.	1 2 3 4 5	N/A
4. STUDENT CAN ATTEMPT RESPONSE MORE THAN ONCE.	1 2 3 4 5	N/A
5. FEEDBACK IS SPECIFIC ENOUGH SO STUDENT WILL KNOW RIGHT AND WRONG RESPONSE.	1 2 3 4 5	N/A
6. REINFORCEMENT IS SCHEDULED THROUGHOUT PROGRAM.	1 2 3 4 5	N/A
IMPORTANT OVERALL EVALUATION:	1 2 3 4 5	N/A

5 = EXCELLENT, RECOMMEND WITHOUT HESITATION.
4 = ABOVE AVERAGE, CONSIDER PURCHASE.
3 = AVERAGE, MAY WANT TO LOOK FOR SOMETHING BETTER.
2 = FAIR, REQUIRES CHANGES TO BE EFFECTIVE.
1 = POOR, DO NOT RECOMMEND PURCHASE.

CURRICULUM FOR SECONDARY SCHOOL TRANSITION

Most handicapped students face one of the most difficult times in their schooling as entry is made into the junior high school. The elementary school environment will change to a bigger school building with greater numbers of students, new academic material, a large number of teachers, and increased expectations of independent social and academic behaviors.

Simply preparing handicapped students in basic academic skills is not enough to ensure success at the secondary level. As referred to earlier, students have to learn how to learn for success in the mainstream setting. A learning strategy instruction should be undertaken in the fifth and sixth grades. If the handicapped student enters the secondary system with little or no skills with which to compensate for deficits, and is unable to function in the secondary mainstream, junior and senior high resource teachers have little time and even fewer options for effective service.

Some of the time devoted to teaching basic academic skills must be substituted with effective learning strategy skills in the fifth and sixth grade as preparatory for entry into the secondary school. From one to three days a week can be allotted to this transition curriculum, and will depend on the resource room fifth and sixth grade case load and instructional groupings. This section will outline skills needed for transition into junior and senior high school and should be listed as appropriate on each student's IEP.

Junior high curriculum demands differ from those of the elementary school in many areas. The demands/expectations are grouped in three descriptive categories and defined (Robinson, Braxdale, & Colson, 1985):

A. Academic

Academic demands refer to behaviors associated with successful performance in the regular classroom for completion of a course with a passing grade or better.

B. Self-Management/study skills

Self-Management/study skills are behaviors that lead to successful preparation for learning, maximizing reception of actual instruction and appropriate reporting of the material learned in a test situation.

C. Social/adaptive

Social/adaptive demands are defined as behaviors that lead to acceptance by peers balanced by respect for authority and the structure of school.

WHAT SHOULD BE TAUGHT?

The elementary resource room teacher has a multitude of goals and objectives that must be accomplished and not enough time within the mainstreamed setting. A transition curriculum designed to facilitate students' movement from elementary to secondary school settings must be limited, yet the curriculum must target skills most problematic to handicapped students as they enter the secondary level. Mehl (1984) surveyed junior high school teachers about skills in which LD students were least prepared and caused them the most difficulty upon entering the secondary school. From Mehl's study and a review of literature, the following skill list was developed to serve as the core of the transition curriculum. This skill list is not assumed to be all the skills necessary for success in junior high school. The transition curriculum skill list are those critical areas that cause significant problems for a predominant number of handicapped students. Other skills could be added to this list that may be of a particular concern to specific students or resource classrooms. Table 4 lists each skill under the categories (listed above) of academic skills, self-management/study skills, and social/adaptive behavior. A final category, general orientation to junior high, is strongly recommended.

DISCUSSION OF TRANSITION SKILLS

ACADEMIC SKILLS

At the secondary level, reading often ceases to be a single subject offering for handicapped students. Reading becomes a tool by which content material is assimilated in all classes. Handicapped students must become as proficient as possible at extracting meaning from difficult-to-read material from the regular classroom if they are to succeed in the mainstream. Comprehension of content material becomes an important reading goal.

According to Capelli & Markman (1982) and Markman (1981), a skill crucial to understanding and remembering text is the ability to accurately summarize information in one's own words. This cognitive skill process facilitates the integration of information through continual review of what was read. Other researchers (Brown & Palincsar, 1982; Capelli & Markman, 1982; Wong & Jones, 1982) successfully taught LD students both at the elementary and junior high school levels to monitor their reading comprehension in this manner. Students should be taught to paraphrase the main idea and selected details of paragraphs from their reading program.

The ability to paraphrase and summarize information is also important in learning how to take notes (Saski, Swicegood, & Carter, 1983). Taking notes from texts and lectures is a significant new demand for students at the secondary level. The skill of paraphrasing is prerequisite to learning how to take notes effectively.

Text analysis skill involves learning how textbooks are organized

TABLE 4

Skills Taught in the Transition Curriculum

SKILL	WHEN TAUGHT	
	5th Grade	6th Grade
Academic Skills		
A. Reading for the purpose of content comprehension (De-emphasis on decoding)		
1. Paraphrasing/Summarizing		
a. Oral paraphrasing	x	
b. Written paraphrasing/ taking notes from text	x	
2. Text analysis		x
Self-Management/Study Skills		
B. Listening		
1. Following oral directions	x	
2. Notetaking from lectures		x
Self-Management		
C. Planning Work Time		
1. Planning time use at school	x	
2. Planning study time at home	x	x
3. Organization of materials		x
D. Record-Keeping Techniques		
1. Assignment record keeping	x	
2. Assignment completion	x	
3. Self-evaluation of assignments before submission		x
E. Test Taking		
1. Test preparation		x
2. Test taking		x
Social/Adaptive Behavior		
A. Interactive Learning		
1. Appropriate questioning	x	
2. Interpreting feedback	x	
3. Group discussion skills		x
General Orientation to the Secondary School		x

(Skill list from Robinson, Braxdale, & Colson, 1985)

and is not typically taught at the elementary level. The ability to identify how a chapter fits into a book section, how boldface print and italics indicate main ideas, key details and important vocabulary, and how illustrations are used to reinforce and restate important information can help resource room students better comprehend information from textbooks (Robinson, Braxdale, & Colson, 1985).

SELF-MANAGEMENT/STUDY SKILLS

Listening becomes a critical skill at the secondary level. More class time is spent listening to lectures than was the case in elementary school, and students must be able to follow oral directions given by six or seven different teachers each day. Most students receive little instruction in how to listen well.

A component of the transitional curriculum would be devoted to instruction in strategies students could use to remember and follow oral directions and to listen to lectures and take notes. Robinson (1983) demonstrated that upper elementary LD students could successfully apply a rehearsal strategy to the task of following oral directions after a minimum amount of instruction. Seager, (1985) found that LD students could learn to identify important information in lectures and note it for study later, comprehension was increased as measured by delayed comprehension tests. Both skills are critical to success at the secondary level, many special education teachers perceive resource room students to be inadequate in these skills (Mehl, 1984).

Many resource room students find the increasing demand to work independently a source of great difficulty. No longer are one or two teachers available to help students complete work over the course of a school day. Instead, the resource room student is faced with the secondary school demands of six or seven teachers whose ability to assist students in completing work is limited by the short time in which the instructor and student are in contact and by the fact that each teacher is attempting to meet the demands of about 150 students each day. Independent work skills are necessary for success in secondary schools.

Self-management requires students to become actively involved in managing their own educational programs. Research (Dickerson & Credon, 1981; Seabaugh & Schumaker, 1981; Smith, 1984) has demonstrated that when instructional methods require the learners' active participation in planning the use of their time, most students increase their independent work and seem to change their motivational levels, thereby doing and learning more. Planning one's own work time has been taught successfully to elementary-aged LD students, with a resulting increase in productivity (Lovitt, 1973).

Students should also be taught self-evaluation procedures to evaluate their work before handing it in to the teacher. Student self-recording of performance quality on an evaluative checklist produced positive performance changes in students' work. Such

questions as; "Did I do what I was suppose to do?" "Did I find all the punctuation errors?" etc., were on the checklist. Having students evaluate their own work prior to submission increases a student's success in independent learning situations. Time management, assignment completion, and self-evaluation should be included in the transitional curriculum (Robinson, Braxdale, & Colson, 1985).

Knowledge of course content is often measured through a student's performance on tests. Yet, elementary students often have minimal experience with objective or essay test formats commonly used in junior and senior high settings. Skill in study techniques, terminology used on tests, test preview procedures, scheduling time for completion and review, use of clue words, and how to estimate or "guess" on difficult questions can help resource room students perform better in evaluation situations. Therefore, test preparation techniques, as well as strategies to use while taking a test, should be included in the study skills section of the curriculum.

SOCIAL/ADAPTIVE BEHAVIOR

Learning in an interactive manner (talking with others in a class discussion, asking questions, receiving feedback from teachers and peers) is important in both elementary and secondary school settings. As students enter the secondary school teachers assume that students are proficient in these interactive learning skills. Teachers surveyed by Mehl (1984) noted class discussion skills, the ability to ask appropriate questions, and accepting feedback as areas in which LD students entering the secondary school were deficient and in need of instruction.

SECONDARY ORIENTATION

Many parents and teachers know that the thought of attending a secondary school, for the first time, creates anxiety for most students. A thorough orientation to the junior high setting, informing incoming students of what they will encounter, is necessary. This orientation is often undertaken the last semester prior to attending the secondary school.

Successful orientation programs include counselors from the secondary school visiting with students discussing scheduling, courses, and requirements; going on a tour of the new school and holding orientation meetings for parents. Even a thorough orientation program will leave many unanswered and often basic questions for the handicapped student. Explicit clarification will be required for handicapped students regarding such issues as, moving from class to class within a time limit, organizing and retrieving needed materials from lockers, working a combination lock, coping with more than one teaching style, following a schedule and a host of other day to day operational questions. Repeat visits by receiving teachers and counselors will be needed to help answer questions that resource room students might think of after considering and discussing the new school.

The needs of resource room students at the end of elementary school are often many, and certainly varied. Basic skill instruction must continue. This transitional curriculum must be limited in both scope and necessary time to implement. The proposed curriculum is designed to meet both the basic skills requirement and transition requirements that need to be included on each student's IEP.

TRANSITION CURRICULUM TEACHING STEPS

Before implementing any curriculum the resource room teacher has to know what to teach and then how best to teach to the various deficits and learning styles of his or her students. Successful intervention is a combination of teaching at the correct level using the most effective methods.

Assessment of the learner's correct level of performance is crucial in choosing what skills to teach. Equally important is to limit instruction to only those skills that appear deficient after a preliminary assessment. Observing and interviewing both teacher and student can provide invaluable information in compiling a list of deficit areas in need of remediation.

The check list in figure 5 can be used to determine what areas to begin teaching students in the transition curriculum. An instructional hierarchy both for assessing the student's present level of performance and to what extent each skill is needed for a particular grade or course is recommended. Checking "no knowledge of this skill" would indicate a more intensive approach to remediating this deficit. "Skill emerging--teacher assistance required" would warrant an instructional approach that can build on the student's existing knowledge in this area. Indicating that a student has "mastery of this skill/can train other students" would require only minimal spot-checks by the teacher while also denoting a possible peer tutor for other students in the curriculum.

Teacher effectiveness literature has confirmed the utility of specific teaching practices to ensure student achievement (Bloom, 1984) and mentioned elsewhere in this guide. Providing structure and systematic instruction, using modeling and guided practice, maximizing time in which students are actively engaged in learning activity, and applying mastery learning principles are all techniques that researchers have proved to be highly effective (Robinson, Braxdale, & Colson, 1985).

The following instructional steps were developed by Deshler and colleagues (Deshler, Alley, Warner, & Schumaker, 1981; Schumaker, Deshler, Alley & Warner, 1983). These steps were validated as effective in teaching LD students listening skills, notetaking, comprehension techniques, and other academic social skills and are suggested in delivering the transitional curriculum (Hazel, Schumaker, & Sheldon-Wildgen, 1981; Robinson, 1982; Seager, 1985). The eight-step instructional sequence is as follows:

FIGURE 5

Pre-Assessment of the Learner

Student: _____ Grade: _____ Date: _____

Teacher: _____ Subject: _____

SCORING (1) No knowledge of this skill
(2) Awareness only of this skill
(3) Skill emerging--teacher asistance required
(4) Semi-independence for this skill--teacher assistance rarely needed
(5) Mastery of this skill/ can train other students

Student can:	Student's present level	Level of skill needed for this grade/course	Comments
LISTENING			
°Follow multiple-step oral directions			
°Take appropriate readable notes from lectures			
SELF-MANAGEMENT			
°Plan time needed for reading assignments			
°Plan time needed for written assignments			
°Bring appropriate materials to class			
°Attend class regularly			
°Arrive to class promptly			
RECORD KEEPING			
°Keep records of assignments due			
°Complete assignments on time			
°Self-evaluate potential grade of assignments, tests			
READING CONTENT FOR COMPREHENSION			
°Paraphrase in written form			
°Paraphrase orally			
°Take accurate and appropriate notes from texts			
°Read/interpret graphs			
°Read/interpret illustrations			

Student can:	Student's present level	Level of skill needed for this grade/course	Comments
READING CONTENT FOR COMPREHENSION (cont.) °Take advantage of boldfaced italicized words			
°Take advantage of chapter prefaces summaries			
°Use a table contents			
°Use a glossary			
°Interpret maps			
TEST TAKING °Prepare for tests			
°Succeed on true false tests			
°Succeed on multiple choice tests			
°Succeed on matching tests			
°Succeed on essay tests			
INTERACTIVE LEARNING °Ask appropriate questions			
°Ask for teacher assistance for assignment clarification/additional information in an appropriate manner			
°Accept criticism, praise			
°Participate in class discussions using complete thoughts, staying on current topic with appropriate comments/questions			

(Robinson, Braxdale & Colson, 1985)

Step 1 consists of evaluation of a student's current learning style. If inefficient or ineffective, the need for a new approach to the task is confirmed and discussed with the student.

Step 2 involves describing the new strategy or method of approaching the task.

Step 3 consists of the teacher's modeling the new learning behavior, which may include "thinking aloud" while doing the task.

Step 4 requires the student to rehearse verbally what he or she is to do, ensuring that the student knows what to do and can self-instruct at a later point.

Step 5 requires the student to practice the skill in controlled materials (e.g., ability level reading material, a role play situation) so that mastery of the new learning behavior is assured before asking the student to apply it to a "real" demand (for example, taking notes in a regular classroom lecture, reading a grade level text, taking a final exam in geography class).

Step 6 consists of student practice in grade-appropriate materials.

Step 7 is a posttest and discussion of the need to generalize newly learned skills to other settings.

Step 8 consists of tactics to assure generalization through review of the new learning behavior, discussion of where it best can be applied, and supervised practice of the new technique in the generalization settings.

Concurrent with all steps is the use of specific corrective feedback to inform students how they are doing and what they must do to master the task. Feedback to students must be positive, constructive and carefully thought out to maximize student involvement and development of positive attitudes.

All through out secondary schooling, the resource room student should be instructed in the transition curriculum skills with expansion to other mainstream survival skills so maximum benefit can be obtained from as many regular classroom offerings as possible. Most of these skills are directly applicable and valuable to the world of work and to those students considering some form of post high school training.

EVALUATING INSTRUCTIONAL MATERIALS

When using regular curriculum as a supplement to resource room instruction a teacher must first evaluate the appropriateness of the material in relationship to the handicapping condition of a student. Material can vary from building to building and from one district to another. Resource room teachers must be able to evaluate material and provide adaption as needed within the regular curriculum or evaluate new material for possible use with handicapped students.

INSTRUCTIONAL MATERIALS EVALUATION SYSTEM (IMES)

All too often the informal opinions of others or a superficial analysis of materials is the basis for ordering new instructional supplies within a building or school program. The Instructional Materials Evaluation System (IMES) is designed to provide resource room and regular classroom teachers with with a simple, quick system for the analysis of instructional materials (Vasa, Steckelberg, & Asselin, 1981). The teacher review is recorded on an analysis sheet that can be kept for later reference in matching materials to unique student needs.

INSTRUCTIONS FOR COMPLETING THE IMES

A. Type of material

The questions (Figure 6) require the evaluator to simply mark an "X" in the space for requirement met. Elements to be observed include; media or media requirements, duplication by the teacher of materials, other materials required, and durability of the material. Also to be determined are the sensory modalities in regard to obtaining knowledge (input) and demonstration of mastery (output).

B. Teaching Characteristics

The evaluator examines the material from the perspective of how the material is to be used with students. Place the "X" to show which structure is required for initial instruction, drill, practice, or enrichment. Note any unusual characteristics in the comment section.

C. Planning Guides

Prerequisite skills refer to skills needed prior to use of the material. The reading level of material, both grade level and comprehension level, need to be determined. How much time do students need to stay on task? Are math skills needed, and if so what degree of difficulty? Are instructional objectives provided? Is the sequence of the material orderly, are there any gaps? Can instruction be varied and does the material contain a remediation component for students having difficulty with mastery?

FIGURE 6

Instructional Material Evaluation System (IMES)

Title_____ Publication Date_____

Publisher_____ Subject areas_____ Cost_____

Brief description_____

1. Type of Material:

   A. Media/hardware required_____
      (describe)_____
   B. Duplication required_____
      (type)_____
   C. Other material required_____
      _____
   D. Sensory mode required:

	Input	Output
Visual	___	___
Auditory	___	___
Haptic	___	___

   E. Durability:_____good ____ poor

2. Teaching Characteristics:

Format	Self-Instruction	One-on-One Tutorial	Small Group	Group
A. Initial instruction	___	___	___	___
B. Drill and practice	___	___	___	___
C. Enrichment	___	___	___	___

   Comment:_____

3. Planning Guides:

   A. Prerequisites stated:
      ___math skills_____
      ___reading level_____
      ___attention skills
      ___prevocational skills
   B. Objectives provided:
      ___specific;___general;___not stated
      Comment_____
   C. Sequence of instruction:
      ___complete;___gaps;___not determinable
   D. Redirection:
      ___can recycle; ___can vary instruction;
      ___no direction possible
      Comment:_____

4. Placement/Evaluation:

   A. ___pretest for placement
      ___no pretest
   B. ___progress assessment
      ___teacher's guide
   C. ___assessment geared to objectives of material
   D. ___mastery assessment
      ___none available

5. Appropriate Instruction:

   A. ___appropriate practice for student
      Comment_____
   B. ___errorless learning provided
   C. Reinforcement:
      ___general instructions
      ___specific instructions
      ___none specified
   D. ___directions are appropriate
   E. ___adequate instructional cues
   F. Instructional units:
      ___length
      ___number of new concepts introduced
      ___time

6. Field Test Results:

   A. Subjective:
      ___expert appraisal
      ___publisher testimonial
      ___marketing research
      ___group/individual field test
      ___controlled study

   Adaptability:

   Comments_____

(Steckelberg & Vasa, 1980)

D. Placement and Evaluation

Do pretests exist for placing students within the instructional program? Does the material contain assessment guides for the teacher? Does assessment measure achievement of the objectives? Are there mastery tests at the end of each unit?

E. Appropriate Instruction

Does the material provide enough practice and is it appropriate? Are instructional aids built into the material such as paragraph headings, italics, underlining, and subheads? Is the material reinforcing to students? Are the directions clear and to the point? Are instructional cues provided for students such as steps to follow and are the units appropriate in length? Are the number of new concepts introduced appropriate? Is the length and time for assignments appropriate?

F. Field Test Results

Does the material include pilot data sufficient enough to support purchase of the material? What type of students were used in field testing the material?

FRY READABILITY FORMULA

Many students are given textbooks that are too advanced for their level of reading. The Fry Readability Formula offers teachers a quick way to pinpoint readability levels in different texts with reasonable accuracy and simplicity. There are microcomputer programs available with a number of readability formulas that can be applied simultaneously as a comparison. If access to a microcomputer readability formula is not available, this paper/pencil method will provide the teacher quick results with minimal effort.

Randomly select three or more 100-word passages from a book or an article. Plot the average number of syllables and the average number of sentences per 100 words on the graph (figure 7) to determine the grade level of the material. Choose more passages per book if great variability is observed, and conclude that the book has uneven readability. Few books will fall in the gray area of the graph, but when they do, grade level scores are invalid. For ease in scoring, as you count syllables, place a slash above or beside each syllable. Then go back and count the number of slashes.

Example:

Mat/ching/ stu/dent/ read/ing/ a/bil/ity/ with/ text/book/
read/a/bil/ity/ helps/ in/su/re/ read/ing/ suc/cess/.
Total = 25 slashes or syllables

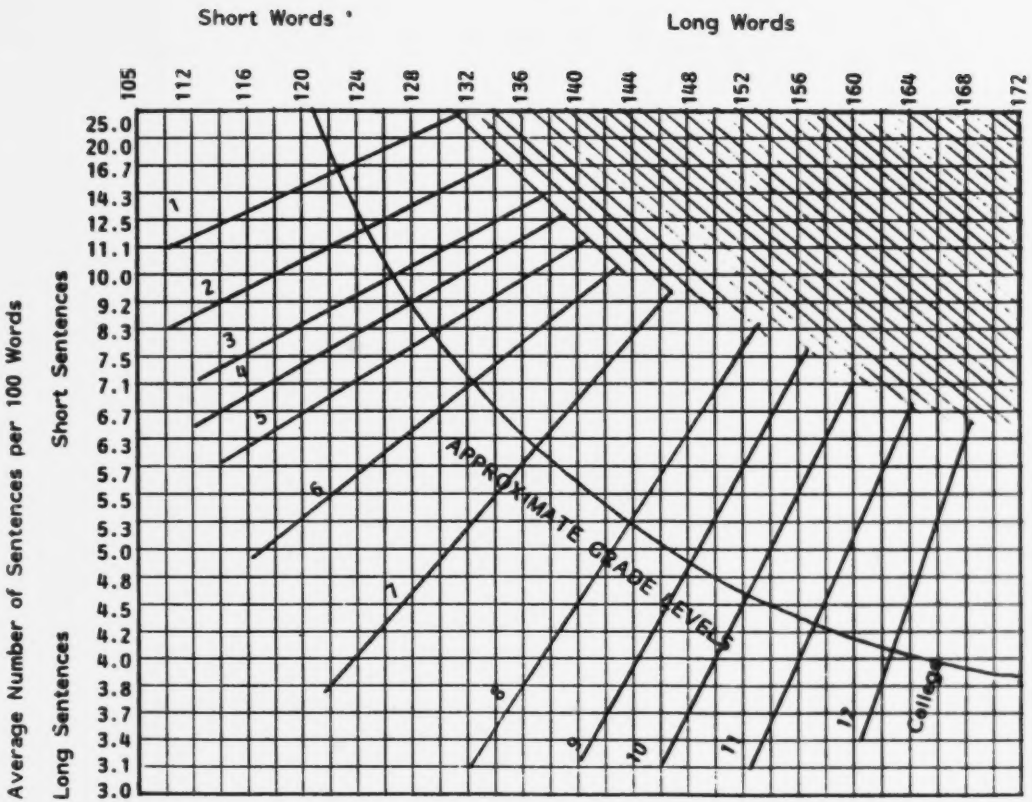

Short Words
Long Words
105
112
116
120
124
128
132
136
140
144
148
152
156
160
164
168
172
Average Number of Sentences per 100 Words
Long Sentences
Short Sentences
25.0
20.0
16.7
14.3
12.5
11.1
10.0
9.2
8.3
7.5
7.1
6.7
6.3
5.7
5.5
5.3
5.0
4.8
4.5
4.2
4.0
3.8
3.7
3.4
3.1
3.0
1
2
3
4
5
6
7
8
9
10
11
12
College
APPROXIMATE GRADE LEVELS

FIGURE 7

Example:	Syllables	Sentences
First hundred words	124	6.6
Second hundred words	141	5.5
Third hundred words	158	6.8

TEXTBOOK CHECKLIST

Selection and evaluation of textbooks are important tasks, especially since the text should be able to meet the different needs of a variety of resource room students. The checklist (Figure 8) aids regular and resoure room teachers in determining the appropriateness of textbooks in the achievement of instructional goals from a course or IEP.

The following four-step approach to reviewing textbooks is provided as a guideline for upper elementary and secondary teachers.

A. Place a check before each statement which is true of the textbook being reviewed. If additional comments are appropriate, they should be noted in the comment section below each statement.

B. Total the number of items checked. See if a majority of the items not checked relate to the needs of your planned instruction.

C. Do a readability check of the text. The Fry Readability Index cited previously in this guide would be appropriate. Remember to do at least three samples of 100 words. The readability level should be commensurate to the students' skill to be served in the resource room.

D. After establishing the readability of the text and completing the evaluation form, have at least one other teacher apply the checklist. Concurrence means the selection is appropriate.

RESOURCE ROOM EXIT REQUIREMENTS

Procedures for placing a student in special education are well defined (Prager, 1983). What is lacking and more difficult to define are specific program exit requirements. For a resource room student, the exit criteria should be a natural continuum of the regular curriculum described as a functional bridge to the mainstream if at all possible.

The initial IEP meeting as well as each subsequent meeting should consider the following general guidelines for written exit requirements as part of the IEP process.

GENERAL EXIT CONSIDERATIONS

A. Periodic student evaluation for parent/student feedback in both regular and special education curriculum should be a part of the IEP.

FIGURE 8

COMPONENTS IN REVIEWING TEXTBOOKS

_____1. The density of concepts is appropriate for the student. The number of new concepts in a paragraph should be limited to one or two. Sufficient elaboration should be provided.
Comment:

_____2. The sentence structure of the text does not always tend to use long and complex sentences.
Comment:

_____3. The text contains a table of contents and an adequate index.
Comment:

_____4. The vocabulary in the text is appropriate to students being considered to use the text.
Comment:

_____5. Pictures and illustrations are used to promote student interest and serve as contextual clues.
Comment:

_____6. Captions for graphs, tables, and diagrams are self-explanatory.
Comment:

_____7. Tables, graphs, and diagrams are located on pages in the text where they are described within the narrative.
Comment:

_____8. New vocabulary words are highlighted, italicazed, or underlined.
Comment:

_____9. The objective of each chapter is presented to the student at the beginning of each chapter.
Comment:

____10. Summaries are included within sections of the book and at the end of each chapter.
Comment:

____11. Careful consideration has been given to avoid bias toward sexes, handicapped, and ethnic groups.
Comment:

____12. The text suggests other readings and activities to stimulate additional student interest and to accommodate different ability levels.
Comment:

____13. Questions at the end of the chapter provide for different levels of comprehension (literal, interpretive, and application).
Comment:

____14. The text relates information to real life situations or to experiences that students have had.
Comment:

____15. The text will contribute to the achievement of course goals or identified student objectives.
Comment:

____16. The textbook has a recent copyright with current illustrations.
Comment:

____17. The textbook provides supportive data for positions and is based on research or authorities in the field.
Comment:

(Steckelberg & Vasa, 1980)

B. Is special education still essential for student success at school?

C. Can other support be provided within the regular class schedule other than resource room service such as Student Assistance Team (SAT) support?

D. At the current rate of skill acquisition, what is the projected length of resource room service before additional mainstreaming and/or exit can be considered?

E. Whenever possible integrate the regular curriculum with the special education curriculum.

F. Cooperatively design phase-out in steps with adequate support from the educational consultant, regular classroom staff, and/or other specialists.

G. Design building level inservice for regular classroom teachers, who must be trained in strategies that work best for handicapped students and indeed all students.

H. Monitor all growth in academic, self-management, and social/adaptive skills as data to be considered for additional mainstreaming and exit.

I. Concentrate on students' learning how to learn and succeed in regular classes and curriculum. Encourage students to become organized and to take responsibility for their own success.

J. Will a certain level of mastery in key IEP objectives determine exit or additional mainstreaming?

K. Identify additional assessment instruments other than those used for initial placement that can help determine the readiness for additional mainstreaming.

Teachers within the resource room program must guard against lower levels of expectations from their students and recognize "learned helplessness" because of special education placement. Maintaining objectivity and realistic expectations is very difficult and will vary greatly from student to student based on the degree and level of the handicapping condition. It is imperative that each resource room teacher keep in close contact with the regular curriculum and students to not lose perspective as to where resource room students are functioning...

<u>No student should be locked into the resource room without consideration for movement into a less restrictive classroom or eventual exit from special education services.</u>

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"This is the worst class I've ever had."

(Phi Delta Kappan, November 1985)

APPENDIX

Curriculum Material Name Exemplary Center for Reading Instruction (ECRI)

Publisher Name ECRI

Address 3310 South 2700 East

Salt Lake City, Utah 84109

Description: ECRI focuses on individualized instruction techniques and positive reinforcement. Teachers elicit correct responses from non-responding students. Mastery levels are established with rate and performance as criteria. Supervised practice and correlated language arts activities are used to increase responses. Good diagnosis and prescriptive techniques as part of the management system.

Student Effectiveness: Helps both visual and auditory learners. Can be used with elementary students and secondary students in reading and content areas of study. ECRI has been used in adult education. Teachers must take training session before using ECRI.

Curriculum Material Name Rally-A Reading Program

Publisher Name Harcourt brace & Janovich

Address 6277 Sea Harbor Drive

Orlando, Florida 32821

Description: High interest/low ability materials to motivate students to read. Functional and study skills emphasized. Integrates many regular education language arts activities. Highly flexible program to fit those with more ability as well as those students with limited ability.

Student Effectiveness: For those "grav area" students LD and EMH grades 6-12. Lower three levels uses a vocabulary range tnat falls within grades 2 to 5.

Curriculum Material Name Keytext

Publisher Name Economy Company

Address 1901 North Walnut Box 25308

Oklahoma City, Oklahoma 73125

Description: A complete basal series designed for students experiencing difficulty in reading. Program has 18 levels-uses language experience techniques, decoding, comprehension and study skills. High interest reading selections.

Student Effectiveness: Best suited for LD students who are visual learners or have problems auditorily. Use care in placing students due to the apparent narrow population of special education students it seems to help. Can be used for grades 1-6 and also has a secondary section for 6-7-8 grade students.

Curriculum Material Name Ginn Reading Series

Publisher Name Ginn & Company

Address P. O. Box 2649

Columbus, Ohio 43216

Description: A regular education reading program that is very effective when used with the Exemplary Center for Reading Instruction (ECRI) techniques. An extremely comprehensive reading program from beginning reading skills up to and including language, literature and study skills.

Student Effectiveness: Can be used with elementary and junior high students. For special education purposes, it should be used with ECRI techniques. Piloted in four elementary resource rooms in Grand Island during 1985-86 school year.

Curriculum Material Name Corrective Reading A-B-C

Publisher Name Science Research Associates

Address 155 Wacker Drive

Chicago, Illinois 60606

Description: Designed for students in grades 4 through adult who have not learned to read in other reading programs. Based on direct instruction procedures. Must be taught intensively for 35 - 45 minutes. Carefully sequenced.

Student Effectiveness: Best for upper elementary and many secondary students. Comes in decoding strands A-B-C as well as comprehension strands A-B-C. Best for unmotivated EMH and SLD students elementary through secondary.

Curriculum Material Name Metra Reading

Publisher Name Navajo Industries

Address Box 1000

Blanding, Utah 84511

Description: A tutorial approach using positive reinforcement. A phonetic and sounds blending approach used one to one or in very small groups.

Student Effectiveness: Best for LD students both elementary and many secondary students.

Curriculum Material Name SQ3R

Publisher Name As published in Journal of Reading December 1982,

Address Adaption for Handicapped Students

Description: A method for taking notes and studying, survey, question, read, recite, and review (SQ3R). The most widely taught method that can easily be adapted and taught to mildly and moderately handicapped students.

Student Effectiveness: Appears to be effective for some EMH and most SLD students with adaption. Can be taught to upper elementary to senior high level students.

Curriculum Material Name Distar Reading I and II (Reading Mastery)

Publisher Name Science Research Associates

Address 155 N. Wacker Drive

Chicago, Illinois 60606

Description: Highly structured reading program based on the direct instructional model. Strengths include left to right sequencing, letter sounds, sound blending and mastery learning. Teachers must take training session before using Distar (Reading Mastery).

Student Effectiveness: Best for elementary (1-3 grades) students learning to read. Student must have auditory strengths, suitable for EMH and SLD students.

Curriculum Material Name The Basic Reading Series

Publisher Name Science Research Associates

Address 155 Wacker Drive

Chicago, Illinois 60606

Description: Language awareness stressed as well as auditory discrimination, whole word, reasoning and perception. A six level developmental reading program grades 1-6. Orderly step by step approach especially good for the student with learning problems.

Student Effectiveness: Seems to work best for those students with auditory discrimination problems that have difficulty with a phonetic approach to reading.

Curriculum Material Name Merrill Linguisitic Reading Series

Publisher Name Charles E. Merrill

Address A Bell & Howell Company

Columbus, Ohio 43216

Description: A linguistic whole word approach with very little phonics or decoding skills. An 11 level series especially designed for elementary students grades 1-6. A words in pattern, sight word, and applications of patterning (visual) program using high frequency words.

Student Effectiveness: Best suited for lower elementary aged students with auditory discrimination problems or can't seem to succeed in a phonetic approach. Group oriented, slow paced with workbook related to reader.

Curriculum Material Name American Readers

Publisher Name D. C. Heath and Company

Address 2700 North Richardt Ave.

Indianapolis, Indiana 46219

Description: A regular education reading basal progrm that has an excellent teacher's manual and guide. Emphasis is in phonetic skills. Has an effective testing program to monitor student growth.

Student Effectiveness: This regular education material has proven to be readily adaptable to LD and EMH early primary special education students.

Curriculum Material Name Triple Action

Publisher Name Scholastic Book Service

Address P. O. Box 644

Lyndhurst, New Jersey 07071

Description: Contains short stories, plays, reading comprehension, vocabulary excellent. Spirit masters available for student worksheets. Has 3 levels for individualization and year-to-year use.

Student Effectiveness: Excellent material to reinforce reading development and skills for EMH and LD junior and senior high students.

Curriculum Material Name ReCare

Publisher Name Reading in Content Areas

Address Jamestown Publications
P. O. Box 6743
Providence, Rhode Island 02940

Description: A study skills approach to reading, comprehension, literature, paragraphing, and essential basic skills. All the material and techniques are high interest that keeps student involvement and productivity high.

Student Effectiveness: Good for junior and senior high special education students. Reading level in the 3-7 grade range.

Curriculum Material Name Superstars of Movies and Sports

Publisher Name Steck Vaughn

Address Box 2028

Austin, TX 78768

Description: Covers all major sports, movies and the personalities. Rock and roll stars as well as country stars included. High interest, very current reading.

Student Effectiveness: Best for junior and senior high special education students. Readability skills fall within grades 3-7.

Curriculum Material Name Real Life Reading Skills Workbook

Publisher Name Scholastic Press Inc.

Address P. O. Box 644

Lyndhurst, New Jersey 07071

Description: Directed toward real life situations with excellent vocabulary and comprehension. Workbook activities approach.

Student Effectiveness: Good for values clarification as well as reading curriculum to reinforce and develop reading skills for LD and EMH junior and senior high students.

Curriculum Material Name English for Everyday Living

Publisher Name Ideal Publications

Address 11000 S. Lavergne Avenue

Oak Lawn, Illinois 60453

Description: Basic English grammar and reading skills are addressed. Hardbound with workbook.

Student Effectiveness: Very effective with EMH and LD junior and senior high students. An excellent supplement to develop and reinforce reading skills while learning basic grammar for everyday use.

Curriculum Material Name Interactive Reading

Publisher Name Janet Norris

Address University of Nebraska - Lincoln

Description: Teaching reading as a communication process using a system of 13 strategies. Reading is taught one to one or in small groups and is made up of components that are integrated and holistic. Reading is taught as a meaningful and purposeful interaction between author and reader. The teacher serves as the missing author to repair communication breakdowns.

Student Effectiveness: Can be used with hard to teach students elementary and junior high.

Curriculum Material Name Word Attack Basics

Publisher Name Science Research Associates

Address 155 Wacker Drive

Chicago, Illinois 60606

Description: Improves word attack skills - silent reading and oral reading. Points are earned and students use a workbook.

Student Effectiveness: Remedial students of all kinds, has worked with both LD and EMH students in elementary grades.

Curriculum Material Name Skill Applications/Decoding Strategies

Publisher Name Science Research Associates

Address 155 Wacker Drive

Chicago, Illinois 60606

Description: Uses a combination of phonics, sight words, and word families. In the form of a kit for grades 1-3. Can be used with older elementary students in many cases. Covers discrete phonics, vowel sounds and rhyming words.

Student Effectiveness: Works best with auditory and visual learners elementary aged. Has been used with both LD and EMH students grades 1-6. Has activity sheets.

Curriculum Material Name Comprehension Skills

Publisher Name Science Research Associates

Address 155 Wacker Road

Chicago, Illinois 60606

Description: A part of SRA's Skills Series Kits. Covers literal, inferential, and critical comprehension. Covers main idea, supporting details, cause/effect and fact/opinion. Teaches thinking -- has activity sheets and student magazine.

Student Effectiveness: Used in grades 4-8. Select carefully when considering use with some junior high students. Can help LD and EMH students. Probably more effective with LD students.

Curriculum Material Name Easy Reader Classics

Publisher Name EMC Publishing

Address Changing Time Education Service Phone 800-328-1432

300 York Avenue, St. Paul MN 55101

Description: Classic reading for students with low vocabulary skills. Examples include, "Call of the Wild", "Tom Sawyer", "Treasure Island", and "Hounds of the Baskerville".

Student Effectiveness: Very effective supplement to regular English literature class in some schools. Ideal for secondary special education students junior and senior high.

Curriculum Material Name Entering the World of Work

Publisher Name McKnight Publishing Co.

Address Bloomington, Illinois 61701

Description: Excellent reading program aimed at vocational skill development on and off the job. Up-to-date and interesting. Very responsibility and attitude oriented.

Student Effectiveness: Designed for and best suited to high school juniors and seniors.

Curriculum Material Name Sounds, Words and Meanings

Publisher Name Steck-Vaughn

Address P. O. Box 2028

Austin, TX 78768

Description: A very simplified phonics program with lots of repetition of key sound blends. Beginning English skills taught with various levels available.

Student Effectiveness: Very good for elementary LD students.

Curriculum Material Name Reading Comprehension Series

Publisher Name Steck-Vaughn

Address P. O. Box 2028

Austin, TX 78768

Description: A multi-level series making it possible to tailor needed reading skills needed in the regular classroom such as; classifying, vocabulary, following directions, relationships, punctuation, sentence meaning, context clues, and when and where concepts.

Student Effectiveness: Elementary LD and higher functioning EMH students.

Curriculum Material Name Learning Strategies Instruction

Publisher Name Dr. Don Deshler & Dr. Jean Shumaker

Address University of Kansas Institute for Research in Learning Disabilities

Description: Learning strategies instruction involves teaching students "How to Learn". Procedures are based on six years of intensive program development and research used in a wide variety of educational settings and with a widely diverse group of students and teachers. Teachers must take training.

Student Effectiveness: Primarily used with LD students but is effective with all kinds of students. Has been effectively used at the junior and senior high level in the Grand Island area. Training has been offered through college course work.

Curriculum Material Name Prescriptive Reading Inventory (PRI)

Publisher Name CTB McGraw-Hill

Address 2500 Garden Road

Montery, California 93940

Description: A total reading program with a criterion-referenced approach to assessment and instruction for a well organized and articulate program for the management of reading and related language arts in grades K-9. Students can be placed at their instructional levels and prescribed appropriate materials and activities.

Student Effectiveness: Being piloted at the junior high level. The diagnosis, prescription, teaching activities, monitoring, reinforcement and enrichment can be very effective to many special education students.

Curriculum Material Name Words are Important

Publisher Name Hammond

Address 515 Ralley St.

Maplewood, N.J. 07040

Description: A drill and review program for reading skills and vocabulary development. Maintains reading skills and reinforces new skill acquisitions. High interest representation of sophisticated life skills.

Student Effectiveness: Very effective with junior and senior high special education students.

Curriculum Material Name Reading English Rotation

Publisher Name Marcelvn Hobbs

Address Norris School P. O. Box 1087

Thomson, Georgia 30824

Description: An effective identification, grouping and instructional delivery program aimed at high risk junior and senior high students with poor reading skills. Program rotates and effectively integrates reading, English and skills lab. Three instructors work with 15 students and effectively integrate all three classrooms.

Student Effectiveness: Program used at junior and senior high level with good sound data showing effective student growth in reading and language arts skills. Excellent for special education EMH and LD secondary students. Teachers must take training.

Curriculum Material Name Workbook in Idioms

Publisher Name Dormac, Inc.

Address P. O. Box 752

Beaverton, Oregon 97005

Description: Titles such as "Monkey Business", "Sticky Fingers", "Raining Cats and Dogs","Back off", and "Hold Your Horses" helps students understand the idiomatic-expressions of the English language.

Student Effectiveness: Seems to be very helpful for the LD language deficient student. Has interesting stories arranged to effectively hold the attention of special education students at the high school level.

Curriculum Material Name Reading for Everyday Survival Skills

Publisher Name Sunburst Communications

Address 39 Washington Avenue

Pleasantville, NY. 10570

Description: Highly individualized learning units covering not only reading but survival and consumer skills for independent living.

Student Effectiveness: Best suited to junior high and senior high EMH and LD students.

Curriculum Material Name Language for Meaning

Publisher Name Houghton-Mifflin

Address 1900 Batavia Avenue

Geneva, Illinois 60134

Description: A standard elementary curriculum material that is easily adapted to special education. A good basic language program centering on everyday functions.

Student Effectiveness: Works well with LD students and some EMH students in grades 4-5-6.

Curriculum Material Name Distar Language I-II-III

Publisher Name Science Research Associates

Address 155 North Wacker Drive

Chicago, Illinois 60606

Description: A complete basal language program preschool through grade 3. Can be used at same time Distar Reading being taught or used as a pre-reading activity in younger students. Teaches foundation skills for reading comprehension and focuses on expressive and receptive language as well as cognitive developments; can be used in classes where English is not the student's primary language. Based on direct instruction.

Student Effectiveness: Very good for LD, EMH and other students as well as cognitive development. Can be used in classes where English is not the students' primary language. Based on direct instruction concepts.

Curriculum Material Name Basic Skills in English

Publisher Name McDougal Littell

Address P. O. Box 1667

Evanston, Illinois 60204

Description: A slow track well sequenced approach to English with lots of supplementary materials. Written in straight forward manner for low vocabulary students.

Student Effectiveness: Well suited to grades 7-8-9 and other low track classes.

Curriculum Material Name Fokes Written Language

Publisher Name Developmental Learning Materials

Address P. O. Box 4500

Allen, TX 75002

Description: Teaches correct sentence structure without getting into higher levels of cognition and sophisticated grammar. Good for language disordered individuals who do not need to learn grammar.

Student Effectiveness: Very good for EMH, severe LD language disordered students elementary through early junior high.

Curriculum Material Name Guidebook to Better English

Publisher Name Economy Co.

Address P. O. Box 850046

Oklahoma City, OK 73185

Description: An excellent supplement to regular language arts instruction. Review centers on day-to-day English usage.

Student Effectiveness: Upper elementary and junior high LD and EMH students.

Curriculum Material Name Banner English Series

Publisher Name Steck-Vaughn

Address P. O. Box 2028

Austin, TX 78768

Description: A good series for low vocabulary students needing language development. The simple presentation of everyday skills makes it ideal for language disordered students. Has limited practice exercises, must be used with other supplemental material in many cases.

Student Effectiveness: Ideal for LD students, upper elementary and junior high.

Curriculum Material Name Target Spelling

Publisher Name Steck Vaughn

Address P. O. Box 2028

Austin, TX 78768

Description: Multi-level gives the student lots of daily practice. Each lesson introduces only 6 new words that are related. Worksheets are easy for students to learn. Simple instructions helpful to students with reading and vocabulary problems. A consistent format.

Student Effectiveness: Well suited to LD and higher functioning EMH students that can apply phonics and learn spelling through sounds.

Curriculum Material Name Spelling for Mastery

Publisher Name Charles Merrill, Inc.

Address 1300 Alum Creek Drive

Columbus, Ohio 43216

Description: A regular education spelling program that is easily adapted to special education. Used by many schools making mainstreaming and special education coordination a benefit for the student. Uses high frequency word lists. Has excellent placement tests to keep student at his/her own level. Good practice exercises.

Student Effectiveness: Well suited for LD and most EMH elementary students K-6.

Curriculum Material Name Corrective Spelling Through Morphographs

Publisher Name Science Research Associates

Address 155 North Wacker Drive

Chicago, ILL 60606

Description: Intensive one-year spelling program with over 12,000 words, including most problem words. Teaches basic units of meaning in written language (morphographs) that are always spelled according to specific rules. Capitalizes on morphemic (meaning/symbol) generalizations.

Student Effectiveness: Designed for students who have failed to learn through other spelling approaches. Can be used grades 4 - adult but seems to be best suited for LD and EMH students in grades 8 - 12.

Curriculum Material Name Spelling Mastery

Publisher Name Science Research Associates

Address 155 North Wasker Drive

Chicago, ILL 60606

Description: A five level (A-D) basal spelling senses for grades 2-6. Can be used with entire class or in small groups. Has twenty minuite daily lessons that teach spelling strategies. Based on sound/symbol (phonetic) whole word approach and later shifts to meaning/symbol (morphemic) strategies.

Student Effectiveness: Program helps build confidence in LD and some EMH students. An excellent consistent approach.

Curriculum Material Name Distar I Spelling

Publisher Name Science Research Associates

Address 455 North Wacker Drive

Chicago, ILL 60606

Description: Part of Distar Reading Program for elementary students learning to read. Reinforces reading program by uniting sounds and then the word students are learning to read. Highly structured and scripted based on direct instruction concepts.

Student Effectiveness: Very good for 1st and 2nd grade LD and EMH students.

Curriculum Material Name Follet Spelling Program

Publisher Name Follet Publishing Co.

Address 1010 West Washington Blvd.

Chicago, ILL 60607

Description: A workbook format that is good as a supplemental program. Written in easy to follow language for low vocabulary students. Concentrates on high frequency words. Tailor the program to fit mainstreamed spelling program as a supplemental activity.

Student Effectiveness: Good for LD elementary students.

Curriculum Material Name ReCare Spelling Lists

Publisher Name Reading in the Content Areas

Address Jamestown Publishers
P. O. Box 6743
Providence, RI 02940

Description: Spelling lists from reading program. Each student tested to determine level to be used. Concept of teaching based on ReCare reading and supports that reading approach.

Student Effectiveness: Very good for junior and senior high special education students LD and EMH.

Curriculum Material Name Building Spelling Skills

Publisher Name McDougal Littel

Address P. O. Box 1667

Evanston, Illinois 60204

Description: Word lists organized by word similarities and presented as elements that affect spelling such as; structure, sound and function. Designed to strengthen visual perception and meaning. Words organized first by visual similarities and then by phonetic similarities.

Student Effectiveness: Good for LD and some higher functioning EMH students. Allows for differences in learning styles and rates. Good for junior high students and some upper elementary grade 5 and 6 students.

Curriculum Material Name Keys to Spelling Mastery

Publisher Name Economy

Address P. O. Box 26305

Oklahoma City, OK 73126

Description: A comprehensive regular education spelling program that can be easily adapted to special education. Levels A-F correspond to regular grade levels. Has lots of built in practice activities and uses high frequency words.

Student Effectiveness: Can be used with LD and many EMH students. In most cases, it can be individualized and adapted to suit special education needs.

Curriculum Material Name Teaching Spelling Skills

Publisher Name Exemplary Center for Reading Instruction (ECRI)

Address 3310 South 2700 East St.

Salt Lake City, Utah 84109

Description: Used as part of ECRI reading program to reinforce reading program. A highly directed structured reading vocabulary. Uses tracing, modeling techniques, and practice. Mastery set at 100% in most cases. Students must write, say, spell and read the words. Students also must proofread and correct lessons. Program involves learning word formations using visual and auditory discrimination. Teachers must take training.

Student Effectiveness: Well suited to visual, auditory as well as kinesthetic learners at the elementary level (LD and many EMH students).

Curriculum Material Name Corrective Mathematics

Publisher Name Science Research Associates

Address 155 North Wacker Drive

Chicago, ILL 60606

Description: Specifically designed for students in grades 3 through adult who have not mastered basic arithmetic skills. Four modules; addition, subtraction, multiplication, and division.

Student Effectiveness: Designed to teach effective strategies for learning and relearning facts, solving computational problems and translating story problems into numerical statements. Has built in mastery testing. Good for LD and EMH students.

Curriculum Material Name Mathematics Practice

Publisher Name Steck-Vaughn

Address P. O. Box 2028

Austin, TX 78768

Description: Good supplemental practice workbooks in essential math skills.

Student Effectiveness: Good practice for all students having math learning problems elementary and secondary students.

Curriculum Material Name Life Skills Duplicating Masters

Publisher Name Enrich Div. of Onaus

Address San Jose, California 95150

Description: Use up-to-date process and activities in a math and remedial reading package. Has excellent supplementary materials such as; Phone Book Power, Working with Menus, Math in the News, Time and Money, Using Catalogs, Going Places, Consumer Reading, and Life Skills Puzzles.

Student Effectiveness: Can be used as supplementary activities with LD and some EMH students grades 5-12.

Curriculum Material Name Mathematics Modules

Publisher Name Science Research Associates

Address 155 North Wacker Drive

Chicago, Illinois 60606

Description: Students move at their own pace in modules teaching basic fractions, decimals, and percents.

Student Effectiveness: Higher functioning LD students in grades 8-12.

Curriculum Material Name Pacemaker Practical Arithmetic Series

Publisher Name Pitman Learning, Inc.

Address P. O. Box 741-5C01

Belmont, California 94002

Description: Very practical slow paced workbook that is easy to use. Four different books in the series. Keys on the practical application of math.

Student Effectiveness: For low math functioning LD or EMH elementary student.

Curriculum Material Name Distar Math I & II

Publisher Name Science Research Associates

Address 155 North Wacker Drive

Chicago, Illinois 60606

Description: Designed to teach effective strategies for learning and retaining facts, solving computational problems, and working story problems. A direct instruction highly scripted and sequenced with excellent research base. Teachers should have training. For K-6 students.

Student Effectiveness: Breaks complex math skills into component skills, teaches preskills and models effectively for students to combine component skills. Built in tests, worksheets and scripted lessons. Good for any student with math learning problems at the elementary level.

Curriculum Material Name Spectrum Math

Publisher Name Laidlaw Brothers

Address Thatcher and Madison

River Forest, Illinois 60305

Description: Excellent drill on essential skills as well as word problem solving. Students work right in workbook, no copying problems. Excellent sequencing of skills. Good program but needs more skills practice activities.

Student Effectiveness: Sequencing of essential skills very good for students with learning difficulties in math. Ideal for elementary LD, EMH, or any student placed in a "low track" standard math group.

Curriculum Material Name Photo Math

Publisher Name Educational Activities, Inc.

Address P. O. Box 392

Freeport, New York 11520

Description: A unique approach using word problems on a card with a photograph at top on which the information is based. System color coded: 20 cards on whole number problems, 20 cards on fractions, 20 cards on decimals, and 20 cards of a mixed nature.

Student Effectiveness: Fosters problem solving. Good for LD students up through junior high.

Curriculum Material Name Mathematics in Life

Publisher Name Scott-Foresman

Address 1900 East Lake Ave.

Glenview, Illinois 60025

Description: A very sequenced approach to math instruction with a great deal of repetition. Contains computation and story problem sections and is easily individualized for the older student.

Student Effectiveness: Ideal for high school LD and EMH students needing real life math skill development and reinforcement.

Curriculum Material Name Consumer and Career Math

Publisher Name Scott-Foresman

Address 1900 East Lake Avenue

Glenview, Illinois 60025

Description: A good presentation of consumer skills in an interesting "real world" fashion. Covers those essential math areas for independent consumer math functioning.

Student Effectiveness: Ideal for the high school LD or EMH student needing "real" application skills.

Curriculum Material Name Diagnostic Math Inventory (DMI)

Publisher Name CTB McGraw-Hill

Address 2520 Garden Road

Montery, California 93940

Description: A total math program using a criterion referenced approach to mathematics in grades K.6 - 8.9+. DMI provides information that enables teachers to place, assess, diagnose instructional needs, prescribe appropriate materials, teach specific skills, monitor, reinforce and enrich mastered skills.

Student Effectiveness: Being piloted at a junior high and one elementary building. The completeness and monitoring built into the system makes it effective for many special education students.

Curriculum Material Name Touch Math

Publisher Name Touch Math

Address P. O. Box 7402

Colorado Springs, CO 80933

Description: A manual approach allowing students to visualize problems and learn basic operations while self-correcting. Success rate for teaching young elementary students has been excellent. Training required for teachers to purchase material.

Student Effectiveness: Works best with early to middle elementary LD students although has been effective with all students in special education experiencing math difficulties or organizing for counting.

Curriculum Material Name Mathematics for Mastery

Publisher Name Silver Burdett

Address P. O. Box 70458

Chicago, Illinois 60673

Description: Excellent workbooks, colorful with lots of beginning math practice in application areas. Has chapter mastery tests and pre-tests. An excellent beginning math program for special education students.

Student Effectiveness: For grades K, 1 and 2. Program contains few written instructions so works well with LD and EMH students with low reading ability.

Curriculum Material Name Succeeding in Mathematics

Publisher Name Steck-Vaughn

Address P. O. Box 2028

Austin, Texas 78768

Description: Teaches all math content areas. Has chapter mastery tests. Very good for K-6 classroom learning essential operations and application of four basic operations. Has lots of story problems so low reading ability students don't work well in material.

Student Effectiveness: Students like chapter format as it gives them a sense of accomplishment when they finish, the students want to work. Good for LD and EMH students. Consider student reading ability before using material.

Curriculum Material Name Enright Computation Series

Publisher Name Curriculum Associates

Address #5 Esquire Road

North Billerica, Maine 04862

Description: Students work on pages in workbook, no copying problem first. Breaks basic whole number operations into very small steps with each step progressing in difficulty. Has built in progressive review tests at end of each section of 3 lessons.

Student Effectiveness: Has lots of practice built in so students needing basic or remedial instruction in basic whole number operations can have lots of practice. Can help students elementary and junior high LD, EMH.

Curriculum Material Name Metra Math

Publisher Name Metra Publishing

Address 366 South 500 E. #103

Salt Lake City, Utah 84102

Description: A tutorial approach using positive reinforcement. Workbooks well sequenced and cover addition, subtraction, multiplication, division, fractions, and decimals. Can be used one to one or in small groups.

Student Effectiveness: Well suited for any student having trouble in basic math skills. Can be used with elementary and junior high students. Has built in systematic review.

Curriculum Material Name Life Skills Mathematics

Publisher Name Media Materials

Address Dept. 852002 2936 Remington Avenue

Baltimore, Maryland 21211

Description: Has an abundance of everyday math problems and the application for solving them. Geared to the high school student or young adult with application needs for everyday math to be independent.

Student Effectiveness: LD students and some higher functioning EMH students who know the basics of math but can't always apply the basics for everyday living.

Curriculum Material Name Developing Key Concepts in Math

Publisher Name Barnell Loft, LTD

Address 958 Church Street

Baldwin, NY 11510

Description: An excellent supplemental program that does an excellent job of reinforcing what is taught in the regular elementary classroom.

Student Effectiveness: For all types of students needing remedial work in developing math skills at the elementary level.

Curriculum Material Name Sequential Math Series

Publisher Name Modern Education Corporation

Address P. O. Box 721

Tulsa, OK 74101

Description: An excellent practice tool in areas of basic computations (four basic operations plus fractions).

Student Effectiveness: Best suited to grades 3-6 LD and EMH students needing supplemental practice with computation only.

Curriculum Material Name Working With Numbers

Publisher Name Steck-Vaughn

Address P. O. Box 2028

Austin, Texas 78768

Description: Multi-level approach to basic skills in computation. Lots of built in practice in four basic skills operations.

Student Effectiveness: Very good for LD and higher functioning EMH elementary students.